

atg agt aat aaa aac gtc aat gta agg aaa tcg cag gaa ata aca ttc	48
Met Ser Asn Lys Asn Val Asn Val Arg Lys Ser Gln Glu Ile Thr Phe	
1 5 10 15	
tgc ttg ctg gca ggt atc ctg atg ttc atg gca atg atg gtt gcc gga	96
Cys Leu Leu Ala Gly Ile Leu Met Phe Met Ala Met Met Val Ala Gly	
20 25 30	
cgc gct gaa gcg gga gtg gcc tta ggt gcg act cgc gta att tat ccg	144
Arg Ala Glu Ala Gly Val Ala Leu Gly Ala Thr Arg Val Ile Tyr Pro	
35 40 45	
gca ggg caa aaa caa gtg caa ctt gcc gtg aca aat aat gat gaa aat	192
Ala Gly Gln Lys Gln Val Gln Leu Ala Val Thr Asn Asn Asp Glu Asn	
50 55 60	
agt acc tat tta att caa tca tgg gtg gaa aat gcc gat ggt gta aag	240
Ser Thr Tyr Leu Ile Gln Ser Trp Val Glu Asn Ala Asp Gly Val Lys	
65 70 75 80	
gat ggt cgt ttt atc gtg acg cct cct ctg ttt gcg atg aag gga aaa	288
Asp Gly Arg Phe Ile Val Thr Pro Pro Leu Phe Ala Met Lys Gly Lys	
85 90 95	
aaa gag aat acc tta cgt att ctt gat gca aca aat aac caa ttg cca	336
Lys Glu Asn Thr Leu Arg Ile Leu Asp Ala Thr Asn Asn Gln Leu Pro	
100 105 110	
cag gac cgg gaa agt tta ttc tgg atg aac gtt aaa gcg att ccg tca	384
Gln Asp Arg Glu Ser Leu Phe Trp Met Asn Val Lys Ala Ile Pro Ser	
115 120 125	
atg gat aaa tca aaa ttg act gag aat acg cta cag ctc gca att atc	432
Met Asp Lys Ser Lys Leu Thr Glu Asn Thr Leu Gln Leu Ala Ile Ile	
130 135 140	
agc cgc att aaa ctg tac tat cgc ccg gct aaa tta gcg ttg cca ccc	480
Ser Arg Ile Lys Leu Tyr Tyr Arg Pro Ala Lys Leu Ala Leu Pro Pro	
145 150 155 160	
gat cag gcc gca gaa aaa tta aga ttt cgt cgt agc gcg aat tct ctg	528
Asp Gln Ala Ala Glu Lys Leu Arg Phe Arg Arg Ser Ala Asn Ser Leu	
165 170 175	
acg ctg att aac ccg aca ccc tat tac ctg acg gta aca gag ttg aat	576
Thr Leu Ile Asn Pro Thr Pro Tyr Tyr Leu Thr Val Thr Glu Leu Asn	
180 185 190	

FIG.1A-1

gcc gga acc cgg gtt ctt gaa aat gca ttg gtg cct cca atg ggc gaa	624
Ala Gly Thr Arg Val Leu Glu Asn Ala Leu Val Pro Pro Met Gly Glu	
195 200 205	
agc acg gtt aaa ttg cct tct gat gca gga agc aat att act tac cga	672
Ser Thr Val Lys Leu Pro Ser Asp Ala Gly Ser Asn Ile Thr Tyr Arg	
210 215 220	
aca ata aat gat tat ggc gca ctt acc ccc aaa atg acg ggc gta atg	720
Thr Ile Asn Asp Tyr Gly Ala Leu Thr Pro Lys Met Thr Gly Val Met	
225 230 235 240	
gaa taa	726
Glu	

FIG.1A-2

Met	Ser	Asn	Lys	Asn	Val	Asn	Val	Arg	Lys	Ser	Gln	Glu	Ile	Thr	Phe
1				5					10					15	
Cys	Leu	Leu	Ala	Gly	Ile	Leu	Met	Phe	Met	Ala	Met	Met	Val	Ala	Gly
			20					25					30		
Arg	Ala	Glu	Ala	Gly	Val	Ala	Leu	Gly	Ala	Thr	Arg	Val	Ile	Tyr	Pro
		35					40					45			
Ala	Gly	Gln	Lys	Gln	Val	Gln	Leu	Ala	Val	Thr	Asn	Asn	Asp	Glu	Asn
	50					55					60				
Ser	Thr	Tyr	Leu	Ile	Gln	Ser	Trp	Val	Glu	Asn	Ala	Asp	Gly	Val	Lys
65					70					75					80
Asp	Gly	Arg	Phe	Ile	Val	Thr	Pro	Pro	Leu	Phe	Ala	Met	Lys	Gly	Lys
				85					90					95	
Lys	Glu	Asn	Thr	Leu	Arg	Ile	Leu	Asp	Ala	Thr	Asn	Asn	Gln	Leu	Pro
			100					105					110		
Gln	Asp	Arg	Glu	Ser	Leu	Phe	Trp	Met	Asn	Val	Lys	Ala	Ile	Pro	Ser
		115					120					125			
Met	Asp	Lys	Ser	Lys	Leu	Thr	Glu	Asn	Thr	Leu	Gln	Leu	Ala	Ile	Ile
	130					135					140				
Ser	Arg	Ile	Lys	Leu	Tyr	Tyr	Arg	Pro	Ala	Lys	Leu	Ala	Leu	Pro	Pro
145					150					155					160
Asp	Gln	Ala	Ala	Glu	Lys	Leu	Arg	Phe	Arg	Arg	Ser	Ala	Asn	Ser	Leu
				165					170					175	
Thr	Leu	Ile	Asn	Pro	Thr	Pro	Tyr	Tyr	Leu	Thr	Val	Thr	Glu	Leu	Asn
			180					185					190		
Ala	Gly	Thr	Arg	Val	Leu	Glu	Asn	Ala	Leu	Val	Pro	Pro	Met	Gly	Glu
		195					200					205			
Ser	Thr	Val	Lys	Leu	Pro	Ser	Asp	Ala	Gly	Ser	Asn	Ile	Thr	Tyr	Arg
	210					215					220				
Thr	Ile	Asn	Asp	Tyr	Gly	Ala	Leu	Thr	Pro	Lys	Met	Thr	Gly	Val	Met
225					230					235					240
Glu															

FIG.1B

atg	aaa	cga	ggt	att	acc	ctg	ttt	gct	gta	ctg	ctg	atg	ggc	tgg	tcg	48
Met	Lys	Arg	Val	Ile	Thr	Leu	Phe	Ala	Val	Leu	Leu	Met	Gly	Trp	Ser	
	-20					-15					-10					
gta	aat	gcc	tgg	tca	ttc	gcc	tgt	aaa	acc	gcc	aat	ggt	acc	gct	atc	96
Val	Asn	Ala	Trp	Ser	Phe	Ala	Cys	Lys	Thr	Ala	Asn	Gly	Thr	Ala	Ile	
-5				-1	1				5					10		
cct	att	ggc	ggt	ggc	agc	gcc	aat	ggt	tat	gta	aac	ctt	gcg	ccc	gtc	144
Pro	Ile	Gly	Gly	Gly	Ser	Ala	Asn	Val	Tyr	Val	Asn	Leu	Ala	Pro	Val	
			15					20					25			
gtg	aat	gtg	ggg	caa	aac	ctg	gtc	gtg	gat	ctt	tcg	acg	caa	atc	ttt	192
Val	Asn	Val	Gly	Gln	Asn	Leu	Val	Val	Asp	Leu	Ser	Thr	Gln	Ile	Phe	
		30					35					40				
tgc	cat	aac	gat	tat	ccg	gaa	acc	att	aca	gac	tat	gtc	aca	ctg	caa	240
Cys	His	Asn	Asp	Tyr	Pro	Glu	Thr	Ile	Thr	Asp	Tyr	Val	Thr	Leu	Gln	
	45					50					55					
cga	ggc	tcg	gct	tat	ggc	ggc	gtg	tta	tct	aat	ttt	tcc	ggg	acc	gta	288
Arg	Gly	Ser	Ala	Tyr	Gly	Gly	Val	Leu	Ser	Asn	Phe	Ser	Gly	Thr	Val	
60					65					70					75	
aaa	tat	agt	ggc	agt	agc	tat	cca	ttt	cct	acc	acc	agc	gaa	acg	ccg	336
Lys	Tyr	Ser	Gly	Ser	Ser	Tyr	Pro	Phe	Pro	Thr	Thr	Ser	Glu	Thr	Pro	
				80					85					90		
cgc	gtt	gtt	tat	aat	tcg	aga	acg	gat	aag	ccg	tgg	ccg	gtg	gcg	ctt	384
Arg	Val	Val	Tyr	Asn	Ser	Arg	Thr	Asp	Lys	Pro	Trp	Pro	Val	Ala	Leu	
			95					100					105			
tat	ttg	acg	cct	gtg	agc	agt	gcg	ggc	ggg	gtg	gcg	att	aaa	gct	ggc	432
Tyr	Leu	Thr	Pro	Val	Ser	Ser	Ala	Gly	Gly	Val	Ala	Ile	Lys	Ala	Gly	
		110					115					120				
tca	tta	att	gcc	gtg	ctt	att	ttg	cga	cag	acc	aac	aac	tat	aac	agc	480
Ser	Leu	Ile	Ala	Val	Leu	Ile	Leu	Arg	Gln	Thr	Asn	Asn	Tyr	Asn	Ser	
	125					130					135					
gat	gat	ttc	cag	ttt	gtg	tgg	aat	att	tac	gcc	aat	aat	gat	gtg	gtg	528
Asp	Asp	Phe	Gln	Phe	Val	Trp	Asn	Ile	Tyr	Ala	Asn	Asn	Asp	Val	Val	
140					145					150					155	
gtg	cct	act	ggc	ggc	tgc	gat	gtt	tct	gct	cgt	gat	gtc	acc	gtt	act	576
Val	Pro	Thr	Gly	Gly	Cys	Asp	Val	Ser	Ala	Arg	Asp	Val	Thr	Val	Thr	
				160					165					170		

FIG. 1C-1

ctg ccg gac tac cct ggt tca gtg cca att cct ctt acc gtt tat tgt	624
Leu Pro Asp Tyr Pro Gly Ser Val Pro Ile Pro Leu Thr Val Tyr Cys	
175 180 185	
gcg aaa agc caa aac ctg ggg tat tac ctc tcc ggc aca acc gca gat	672
Ala Lys Ser Gln Asn Leu Gly Tyr Tyr Leu Ser Gly Thr Thr Ala Asp	
190 195 200	
gcg ggc aac tcg att ttc acc aat acc gcg tcg ttt tca cct gca cag	720
Ala Gly Asn Ser Ile Phe Thr Asn Thr Ala Ser Phe Ser Pro Ala Gln	
205 210 215	
ggc gtc ggc gta cag ttg acg cgc aac ggt acg att att cca gcg aat	768
Gly Val Gly Val Gln Leu Thr Arg Asn Gly Thr Ile Ile Pro Ala Asn	
220 225 230 235	
aac acg gta tcg tta gga gca gta ggg act tcg gcg gtg agt ctg gga	816
Asn Thr Val Ser Leu Gly Ala Val Gly Thr Ser Ala Val Ser Leu Gly	
240 245 250	
tta acg gca aat tat gca cgt acc gga ggg cag gtg act gca ggg aat	864
Leu Thr Ala Asn Tyr Ala Arg Thr Gly Gly Gln Val Thr Ala Gly Asn	
255 260 265	
gtg caa tcg att att ggc gtg act ttt gtt tat caa taa	903
Val Gln Ser Ile Ile Gly Val Thr Phe Val Tyr Gln	
270 275	

FIG.1C-2

FIG. 1 D



FIG.2A

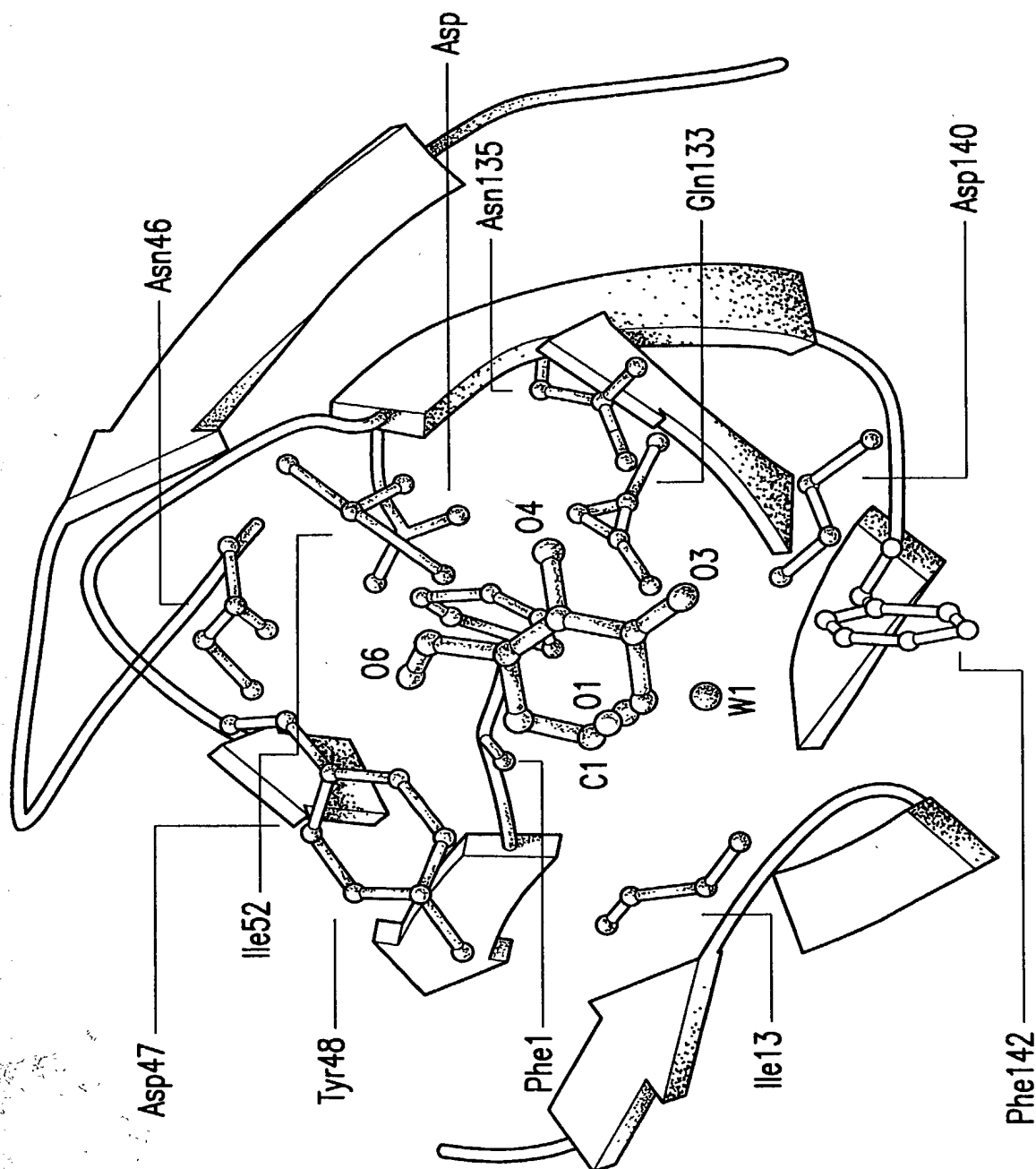


FIG.2B

Docket No.: 10271-037-999
 Serial No.: 10/015,085
 Inventor(s): LANGERMANN et al.
 Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

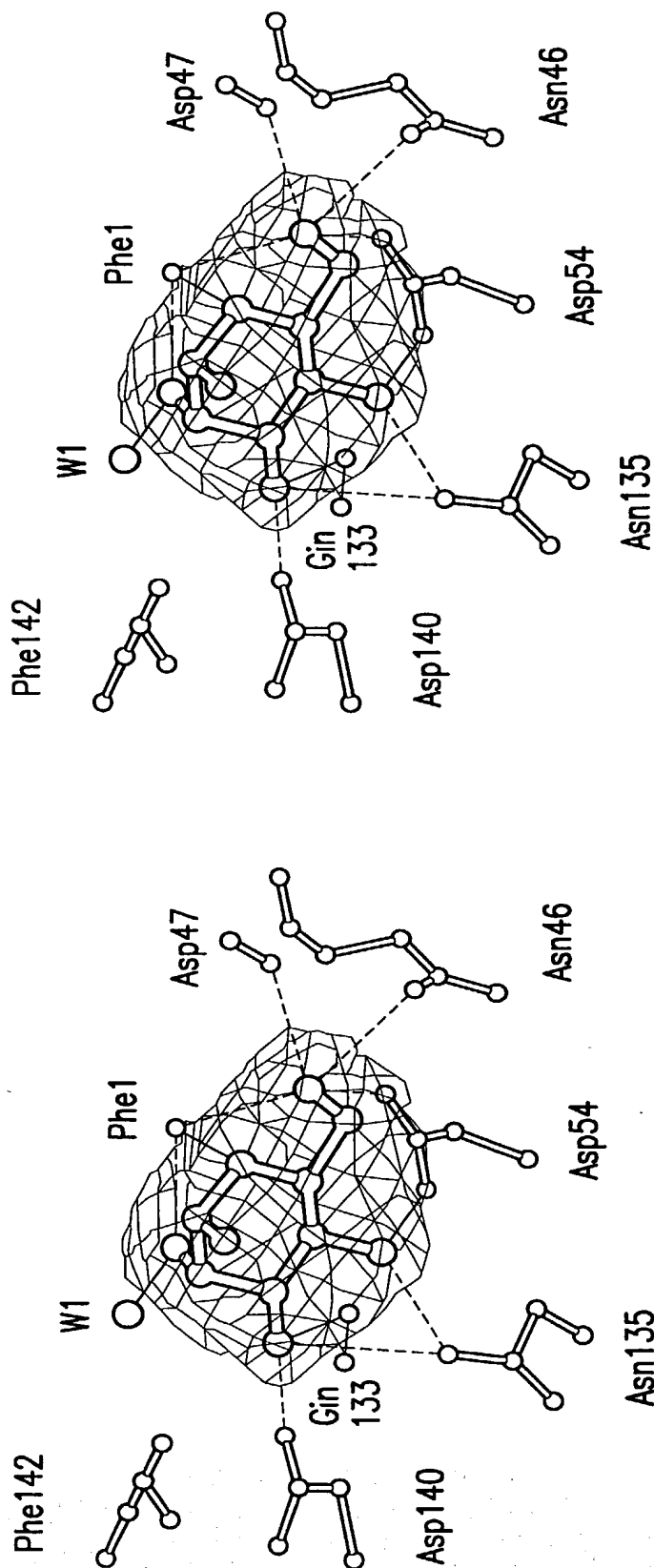


FIG.2C

10/015,085 09/13/07

Docket No.: 10271-037-999
Serial No.: 10/015,085
Inventor(s): LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

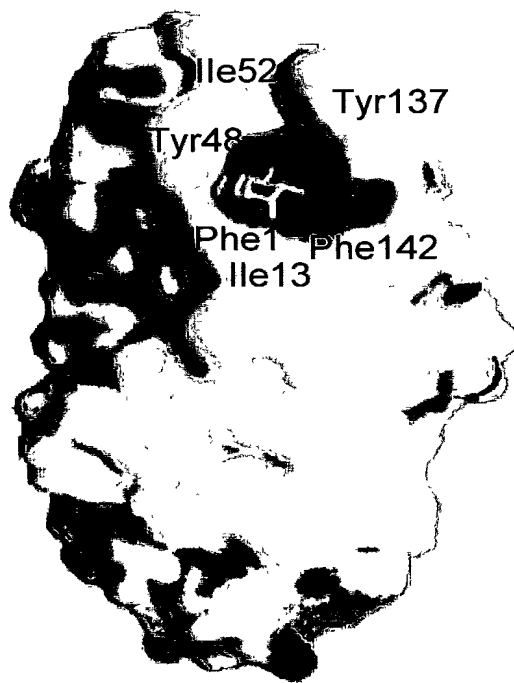


FIG.2D

Inventor(s). LANGERMANN et al.

Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

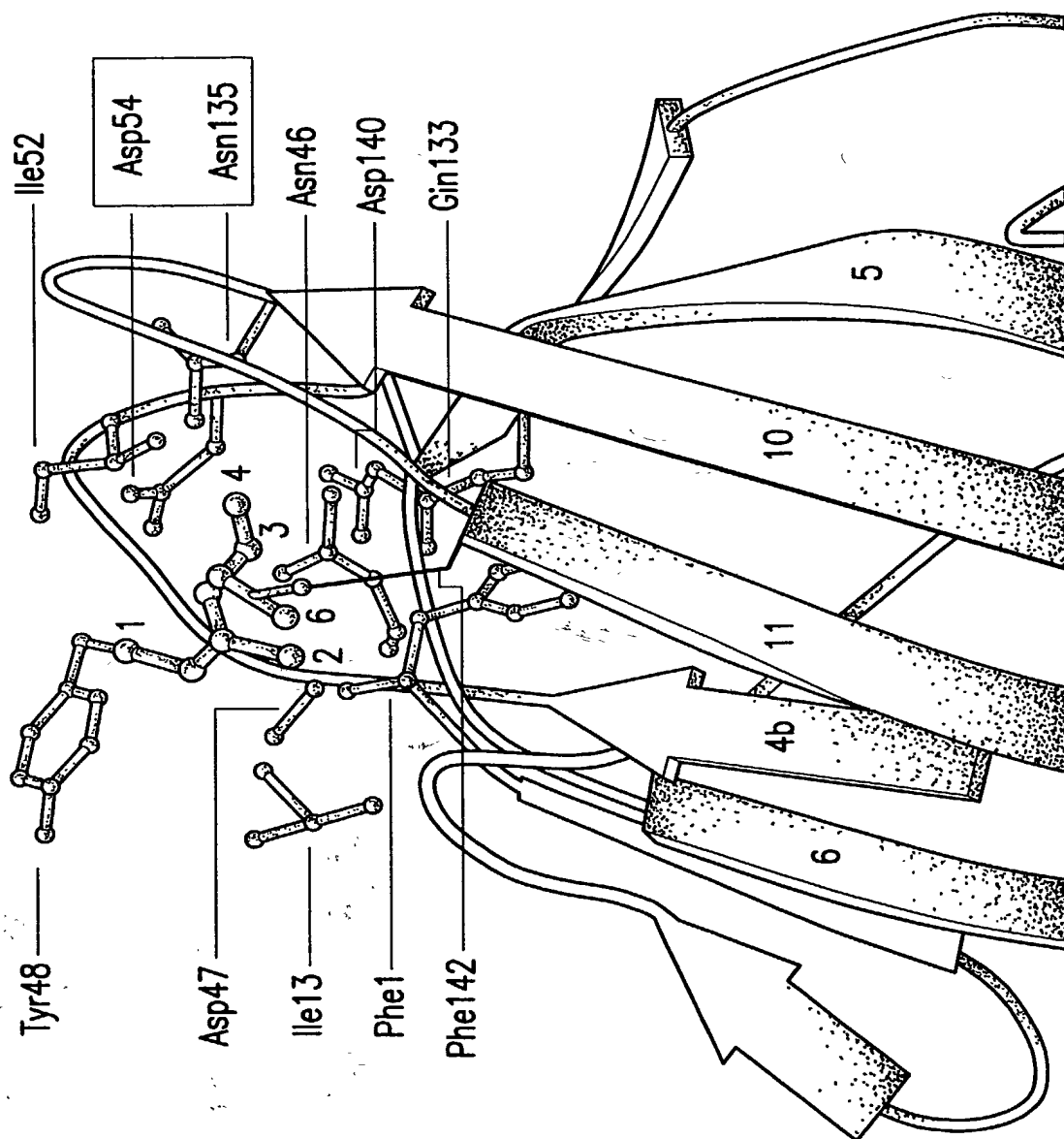


FIG. 2E

	1	13	26	27	42	44	54	62	66	70	74	76	78	110	118	119	126	132	142
J96	F	I	P	V	I	CHNDYPETTTD		S	G	N	T	K	S	P	V	A	I	RQTNNNNSDDF	
EC45	.	.	.	A	.	.....	.	A	.	S	.	.	N	.	.	.	.	.....
B217	.	.	.	A	.	.....	.	A	.	.	.	.	.	.	.	.	.	.....
DS17	.	.	.	A	.	.....	.	.	.	S	.	.	N	.	.	.	.	.....
B212	.	.	.	A	.	.....	.	.	.	S	I	.	N	.	.	.	.	.....
EC42	.	.	.	A	.	.....	.	.	.	.	I	.	.	.	V	.	.	.....
B210	
B228	
B238	.	.	I	A	.	.....	.	.	.	.	.	.	.	.	.	.	.	.....
B240	L	V	.	.....
B242	.	.	.	A	T	.....	.	.	.	.	.	.	.	.	.	.	.	.....
EC58	.	.	.	A	.	.....	.	.	S	S	.	.	N	.	.	.	.	.....
EC60	V	.	.....
EC61	.	.	.	A	.	.....	.	.	.	.	.	E	.	.	.	.	.	.....
EC80	.	.	.	A	.	.....	.	.	.	S	.	.	N	.	.	.	.	.....
EC95	.	.	.	A	.	.....	.	.	.	S	.	.	N	.	L	.	.	.....
EC189	.	.	.	A	.	.....	.	.	.	.	.	.	.	.	.	.	.	...K.....	

FIG.3

Docket No.: 10271-037-999

Serial No : 10/015,085

Inventor(s). LANGERMANN et al.

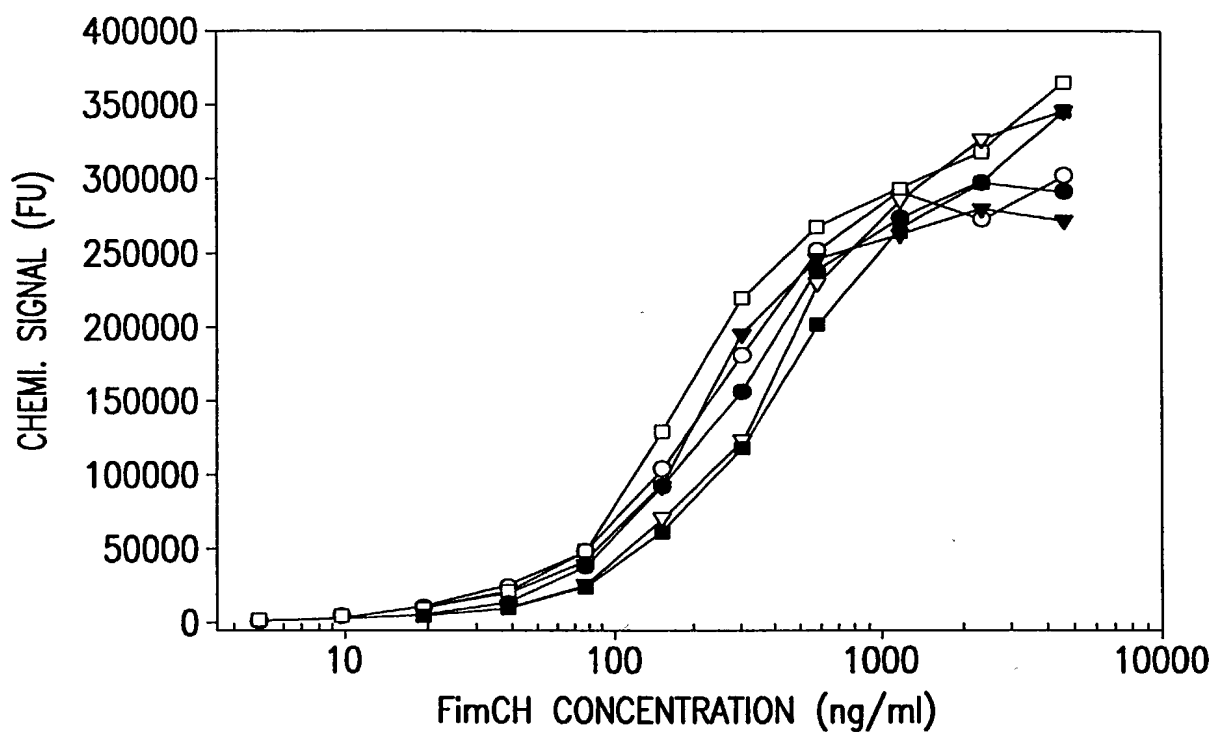
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

FIG.4

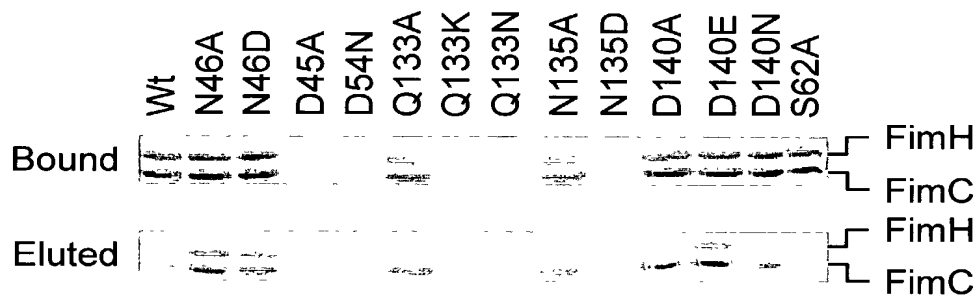


FIG.5A

Docket No.: 10271-037-999
 Serial No. 10/015,085
 Inventor(s). LANGERMANN et al.
 Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
 ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

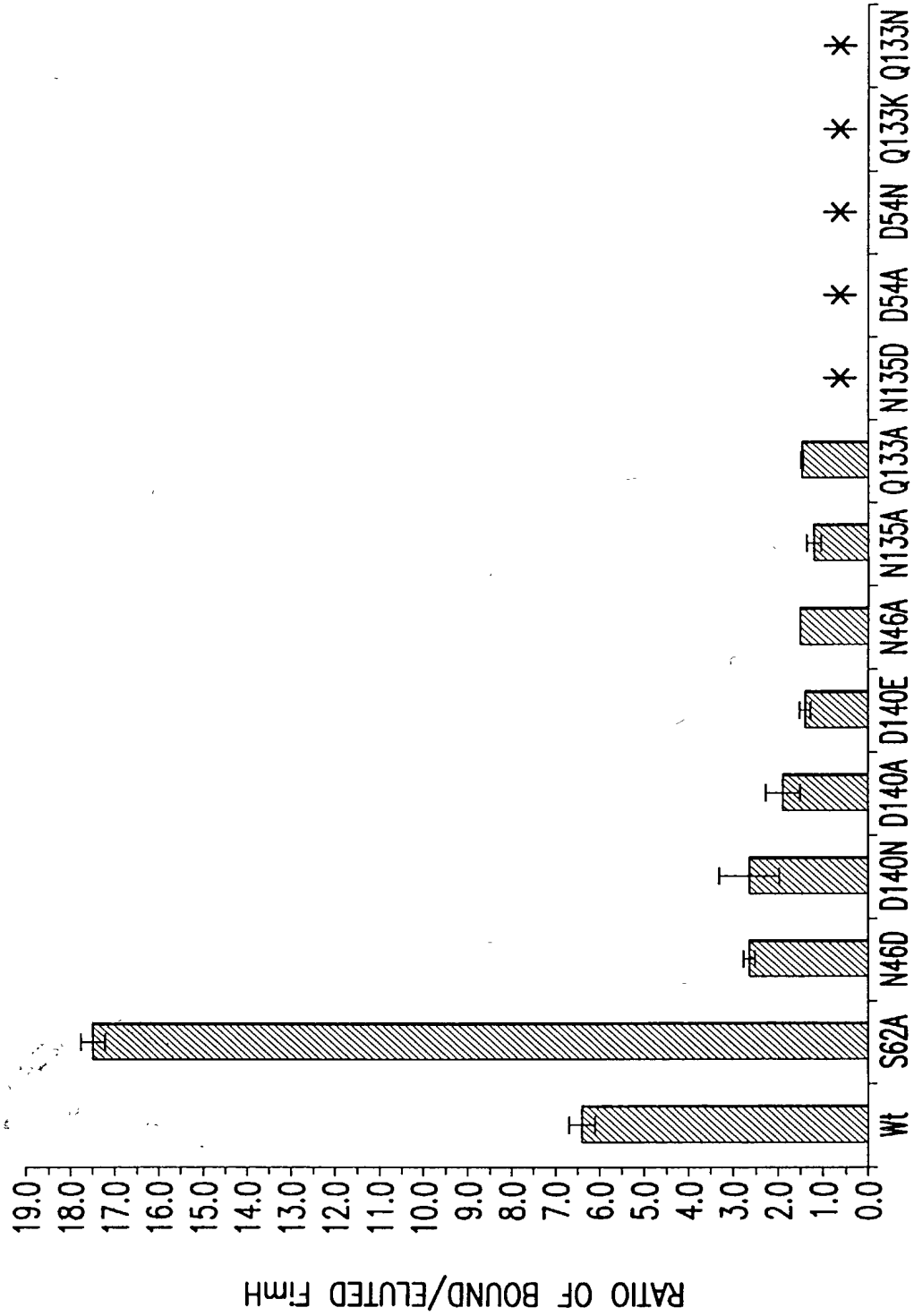


FIG. 5B

Docket No.: 10271-037-999

Serial No.: 10/015,085

Inventor(s): LANGERMANN et al

Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

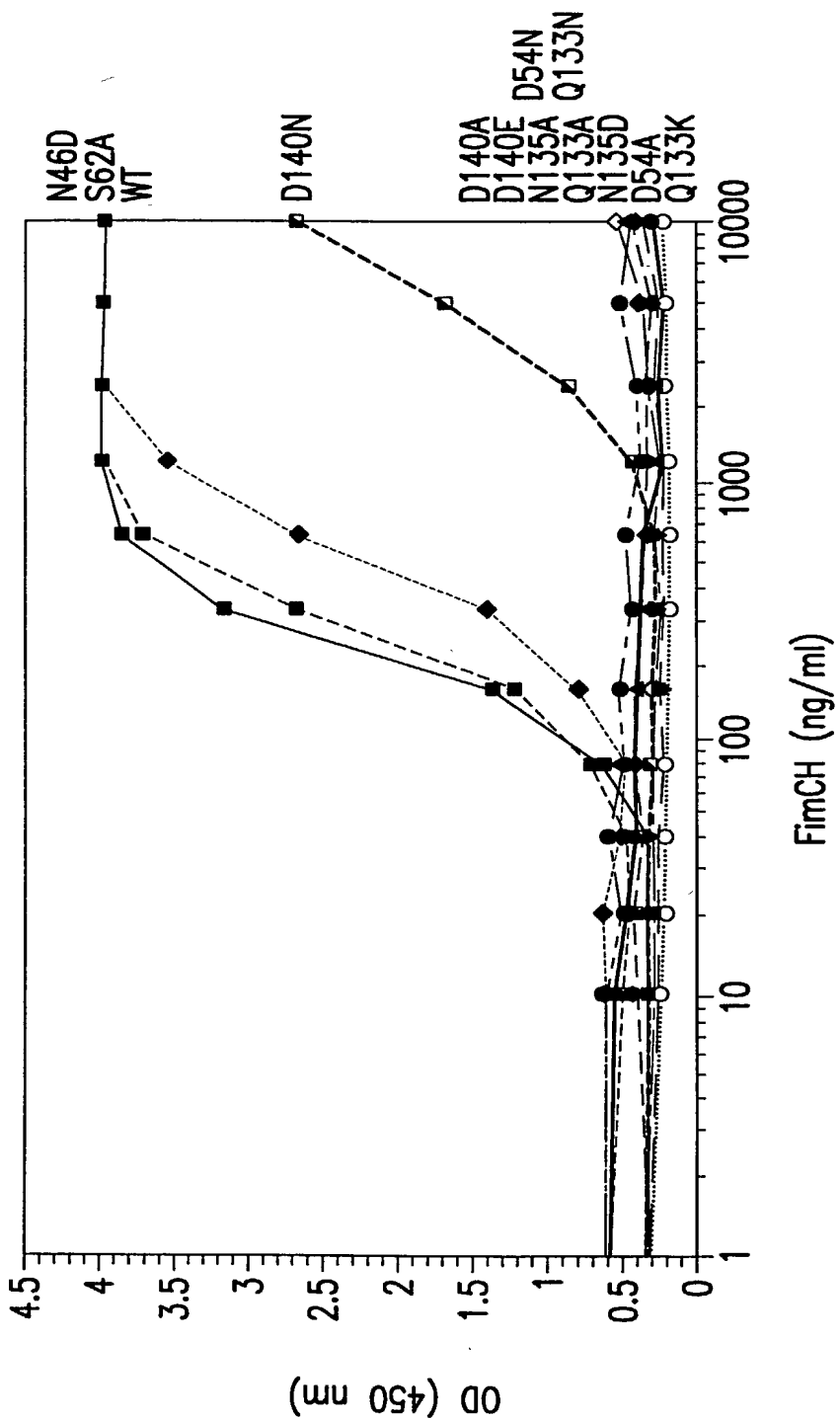


FIG. 6A-1

Docket No : 10271-037-999

Serial No : 10/015,085

Inventor(s): LANGERMANN et al.

Title "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

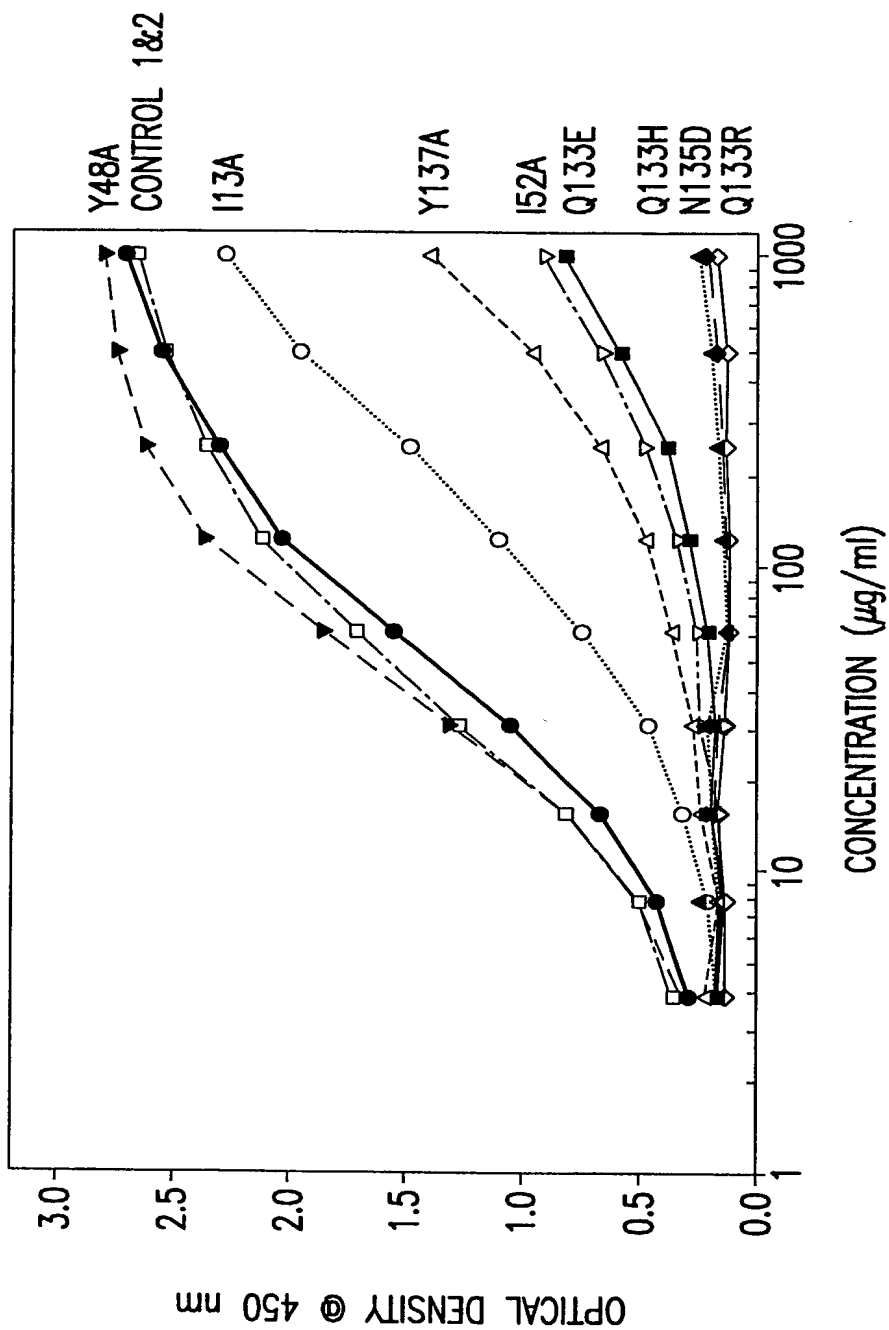


FIG.6A-2

Docket No.: 10271-037-999

Serial No.: 10/015,085

Inventor(s): LANGERMANN et al

Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

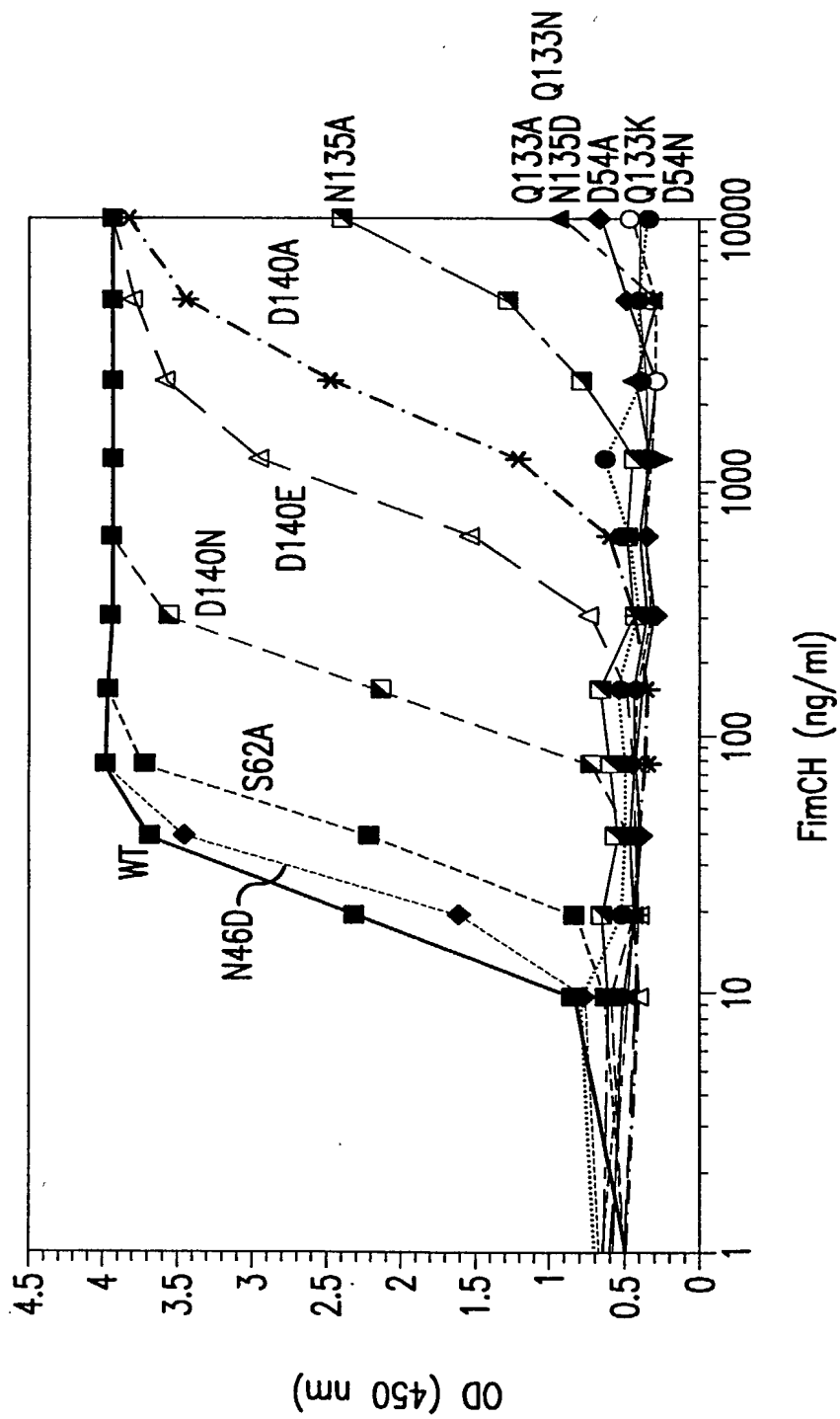


FIG.6B-1

Docket No.. 10271-037-999

Serial No. 10/015,085

Inventor(s): LANGERMANN et al.

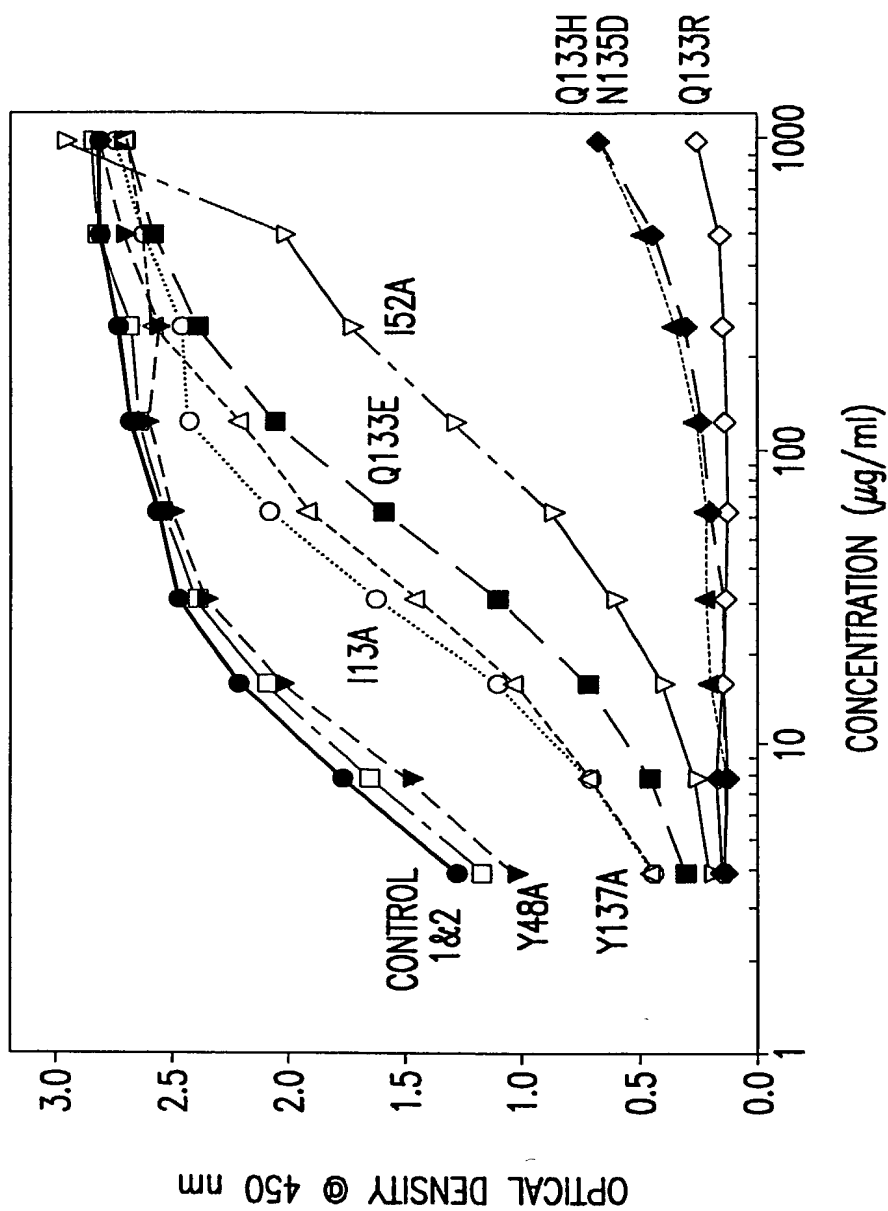
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

FIG. 6B-2

Docket No : 10271-037-999
Serial No.: 10/015,085
Inventor(s): LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

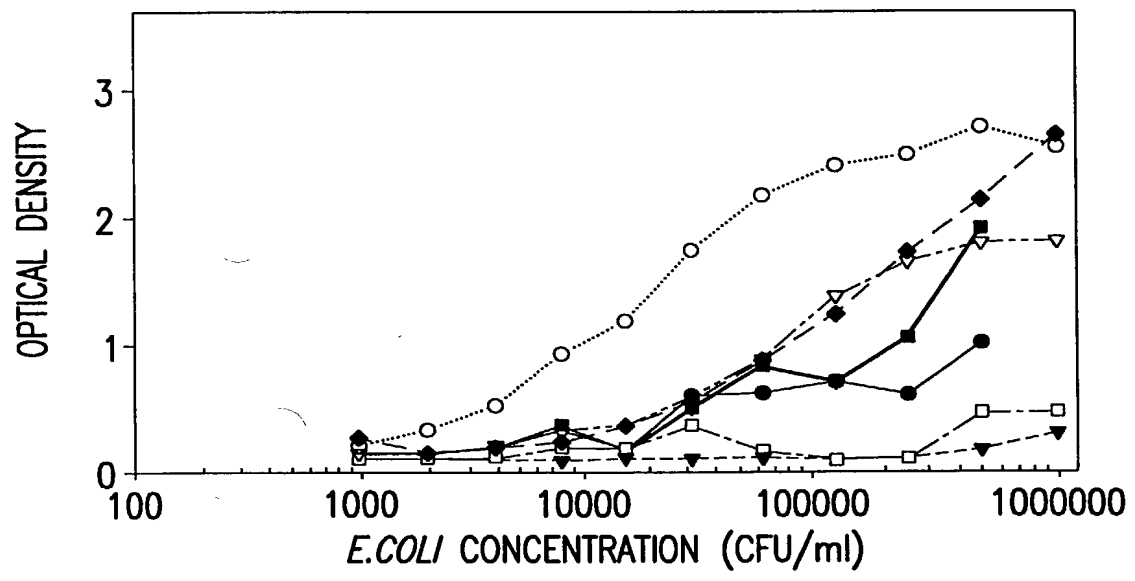


FIG. 7A

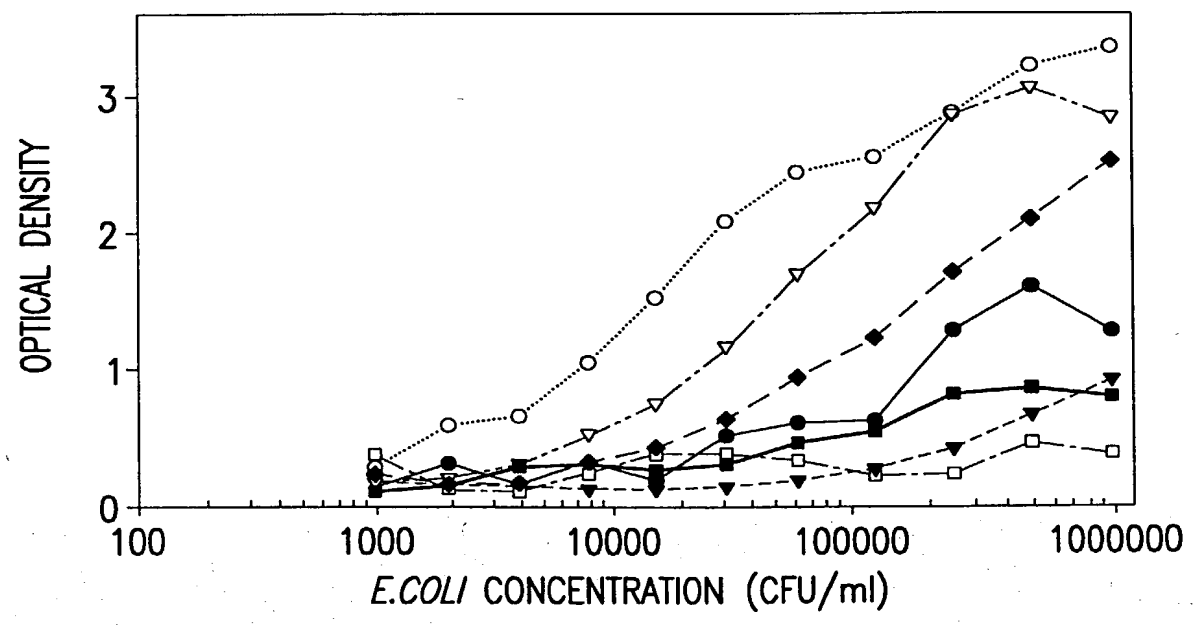


FIG. 7B

Docket No.: 10271-037-999
Serial No.: 10/015,085
Inventor(s): LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

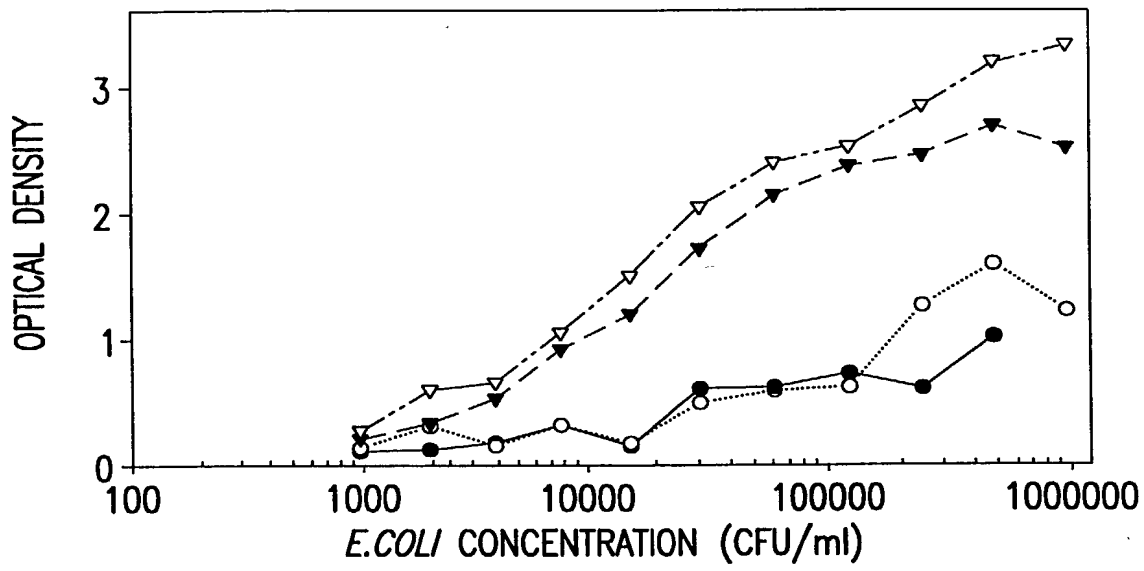


FIG. 7C

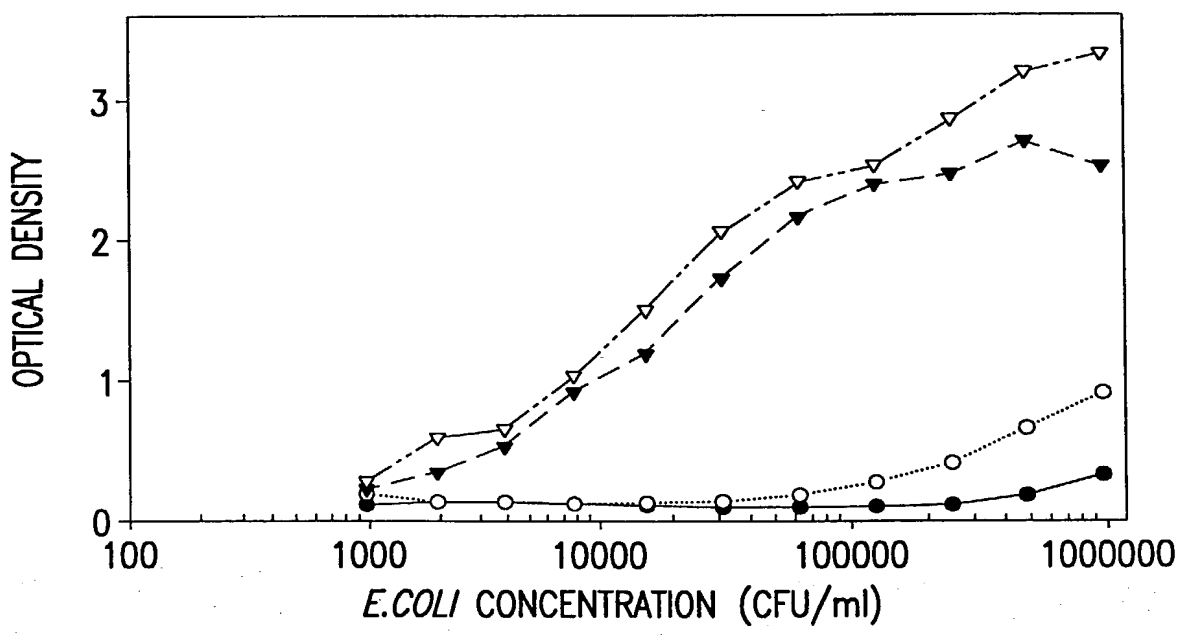


FIG. 7D

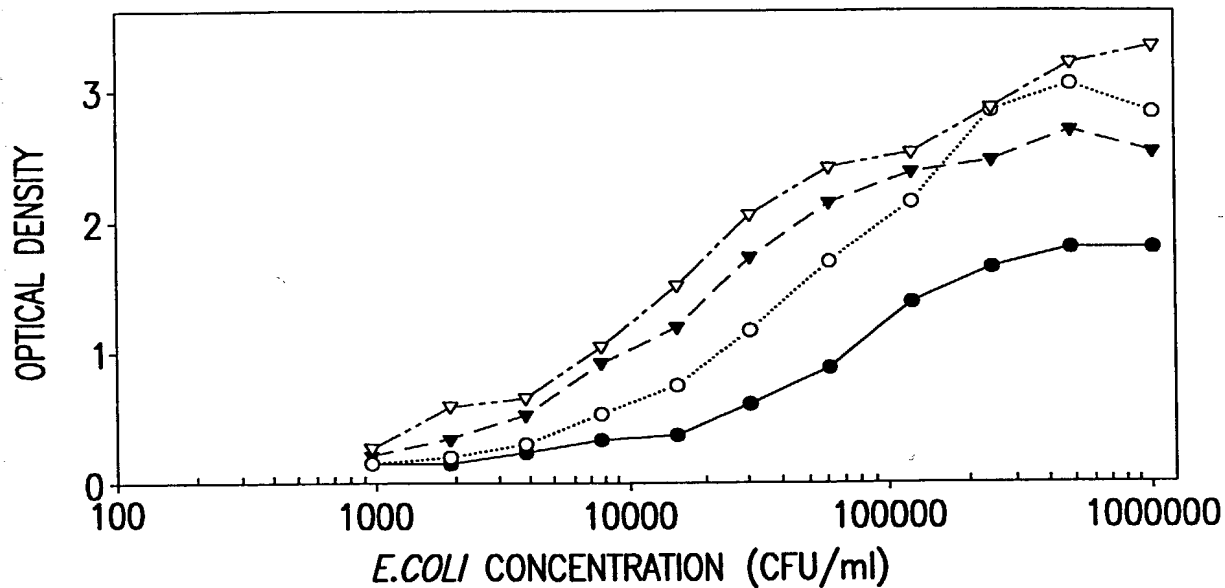


FIG. 7E

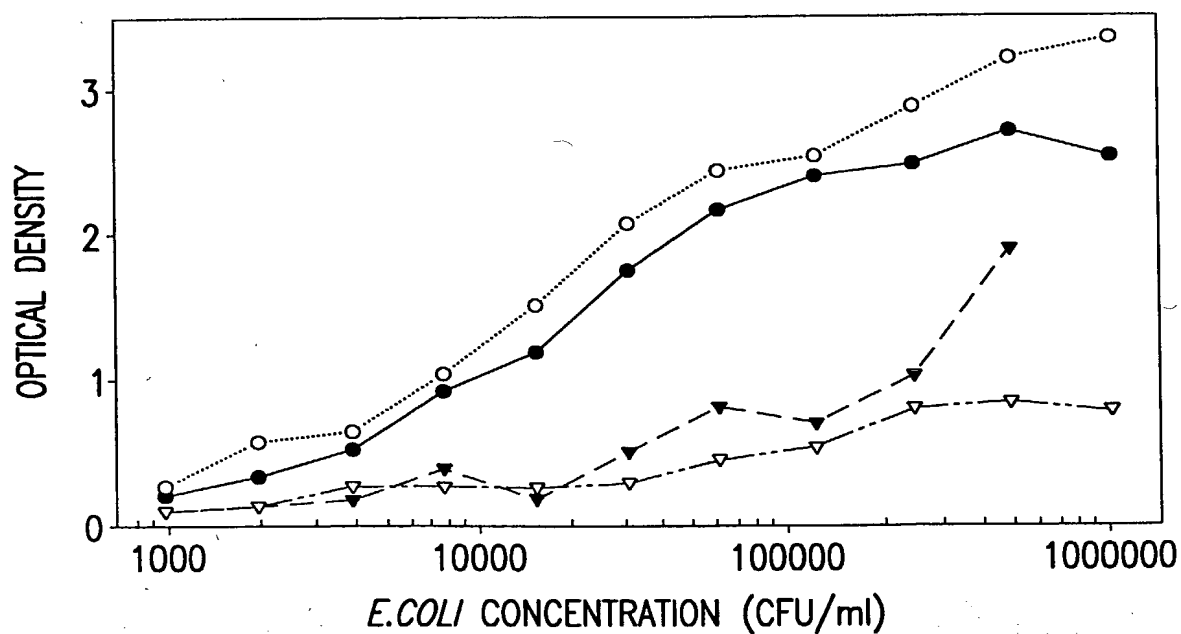


FIG. 7F

Docket No.: 10271-037-999

Serial No.: 10/015,085

Inventor(s): LANGERMANN et al.

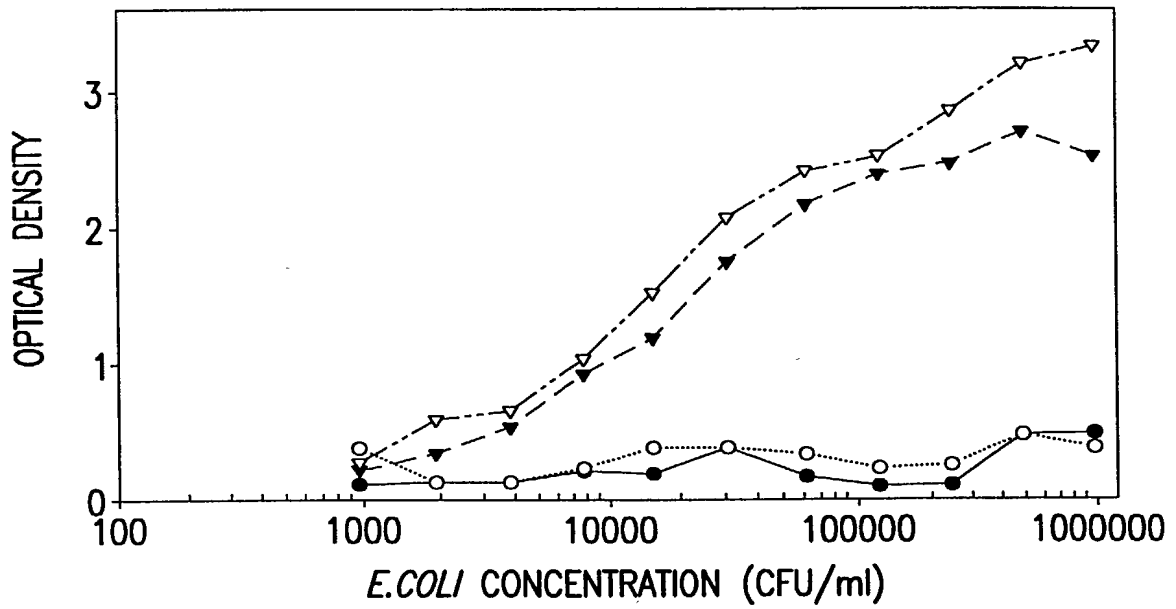
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

FIG. 7G

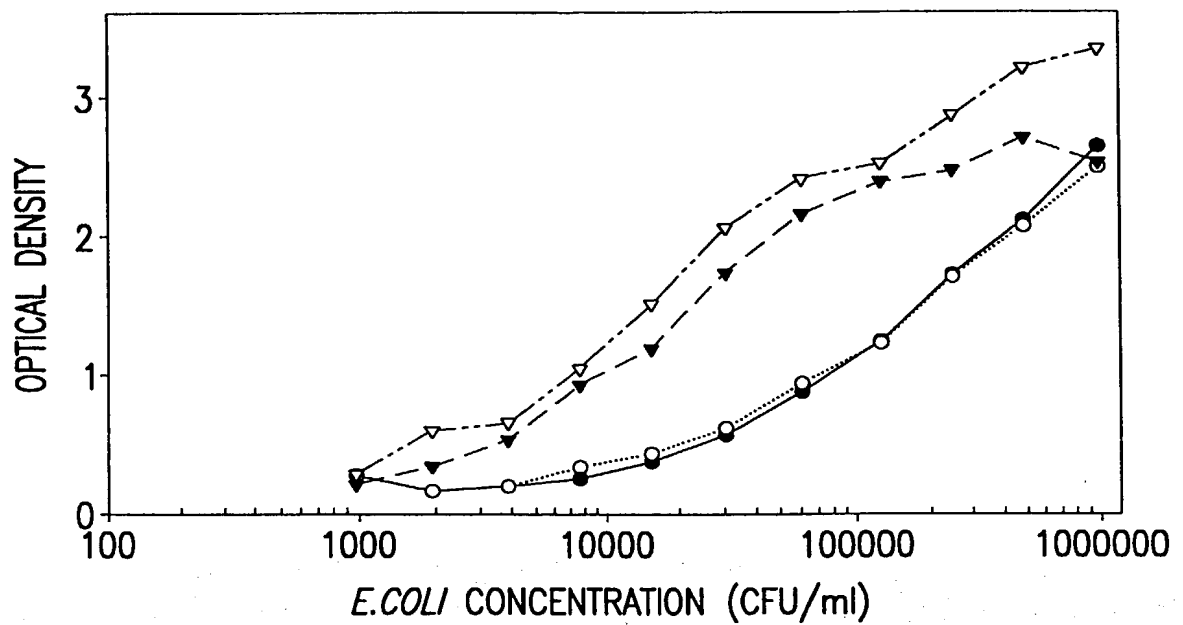


FIG. 7H

Docket No.: 10271-037-999
Serial No.: 10/015,085
Inventor(s): LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

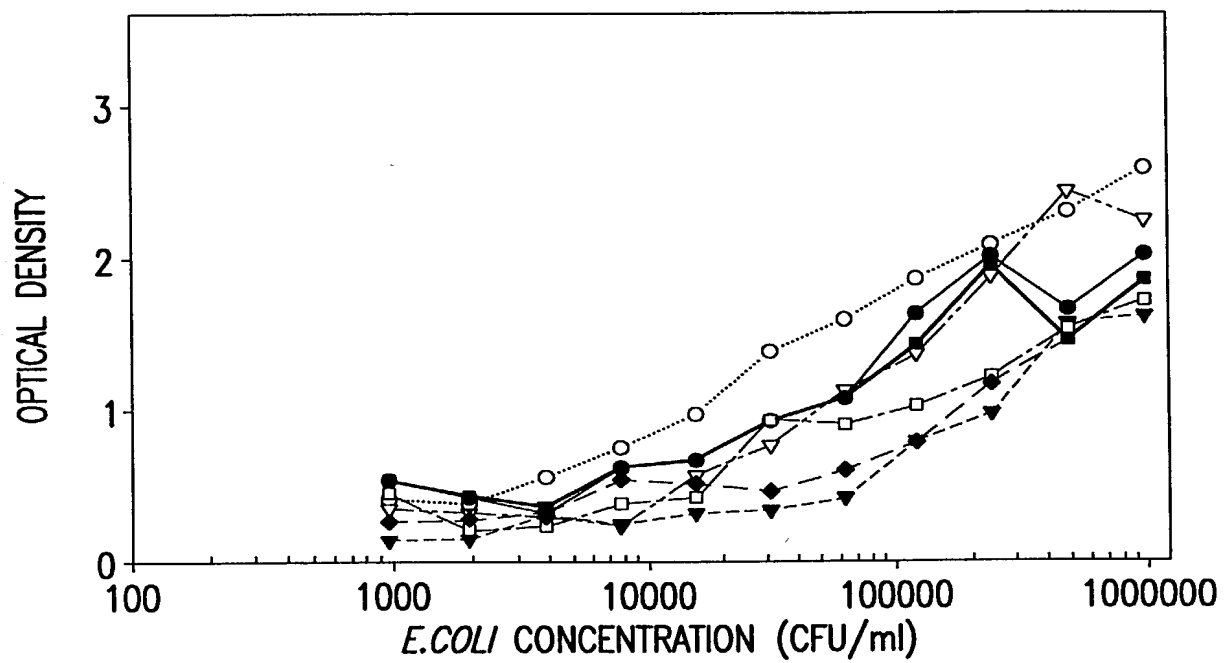


FIG.7I

Docket No : 10271-037-999
Serial No.. 10/015,085
Inventor(s) LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

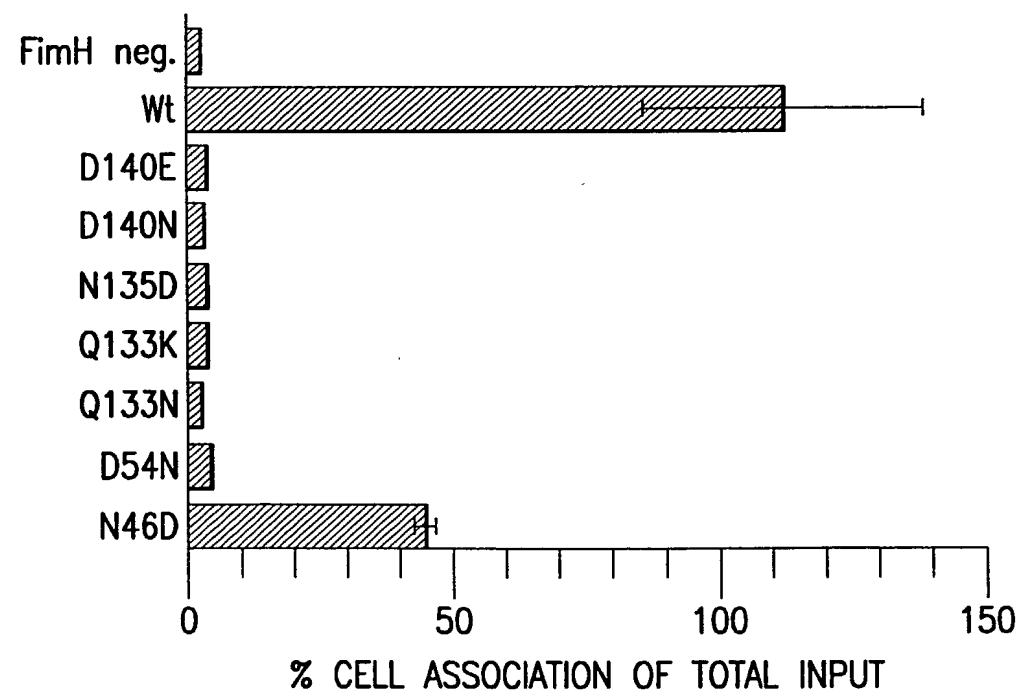
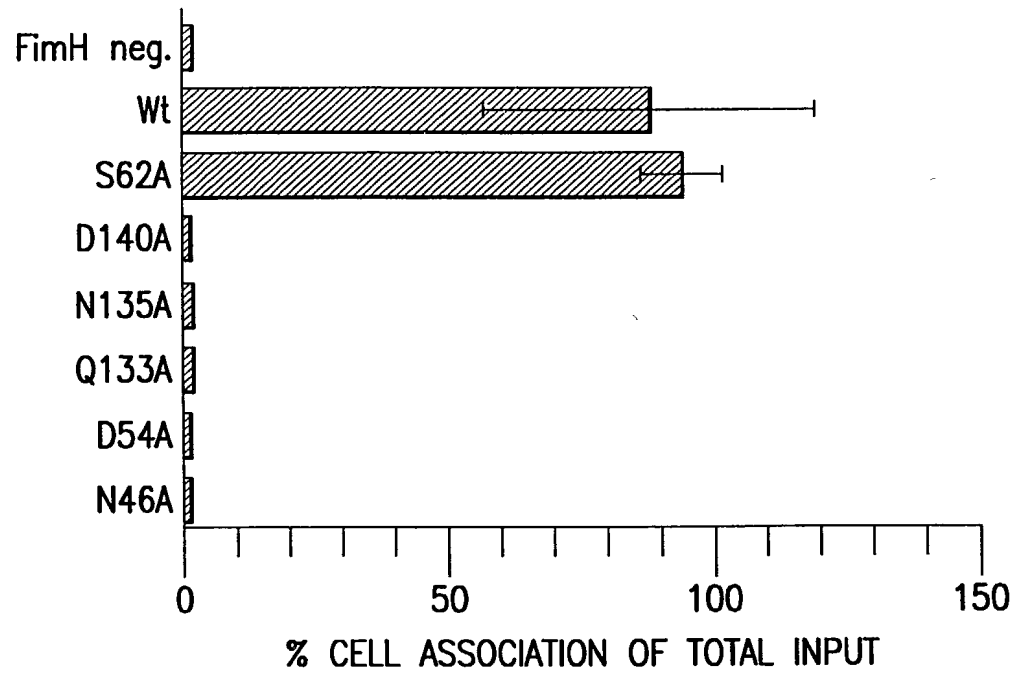


FIG.8A

Docket No : 10271-037-999

Serial No : 10/015,085

Inventor(s): LANGERMANN et al.

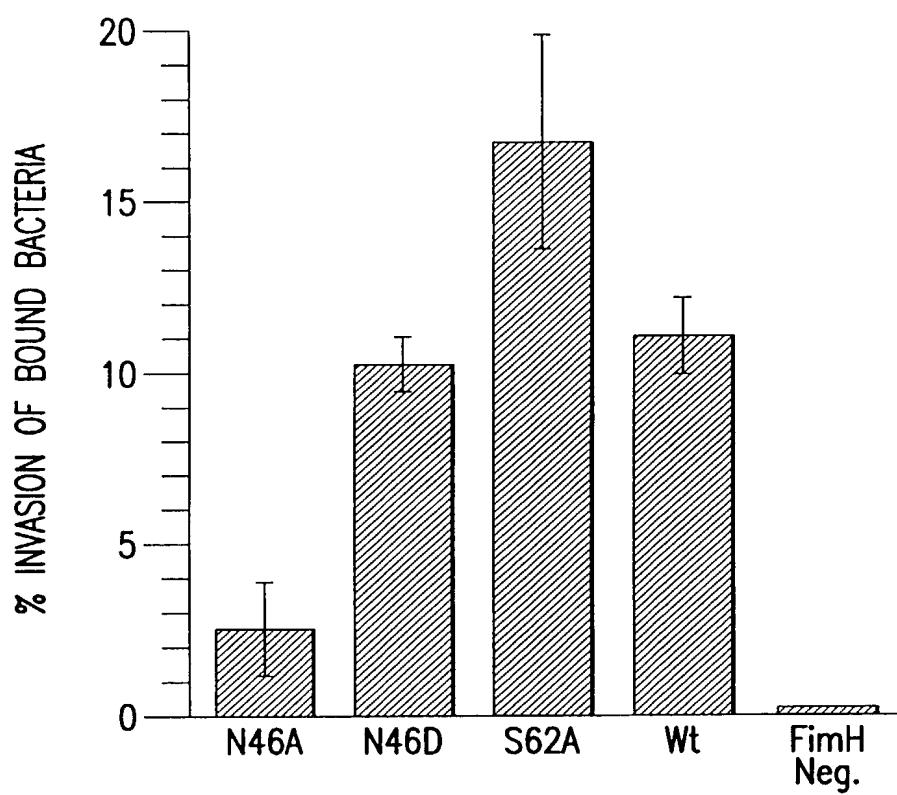
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

FIG.8B

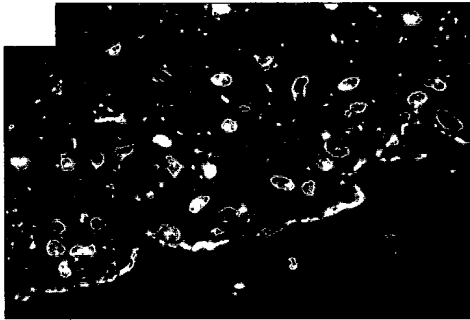


FIG.9A

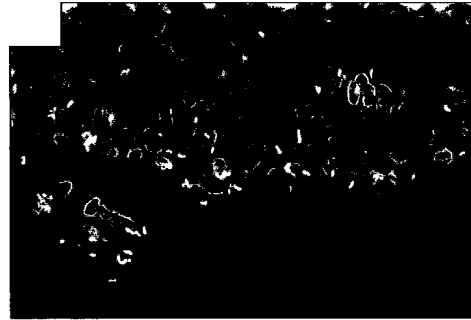


FIG.9B

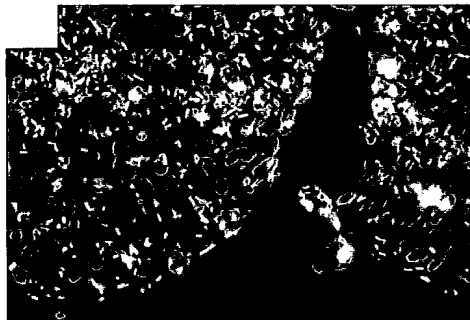


FIG.9C



FIG.9D



FIG.9E

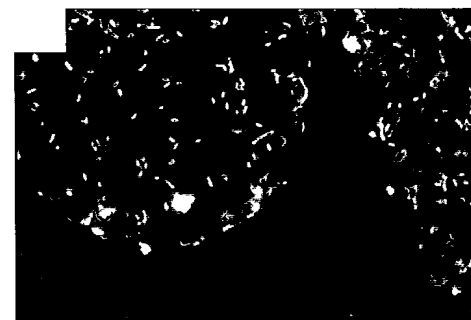


FIG.9F

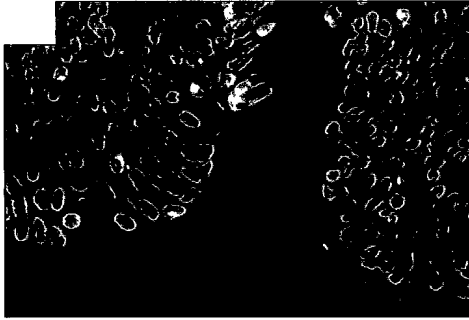


FIG.9G

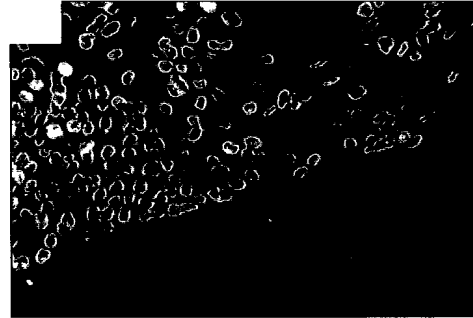


FIG.9H

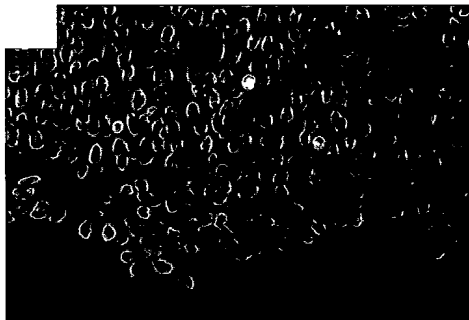


FIG.9I

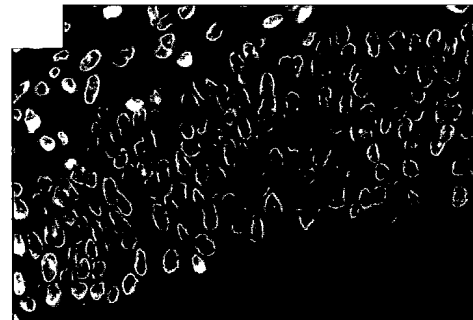


FIG.9J



FIG.9K

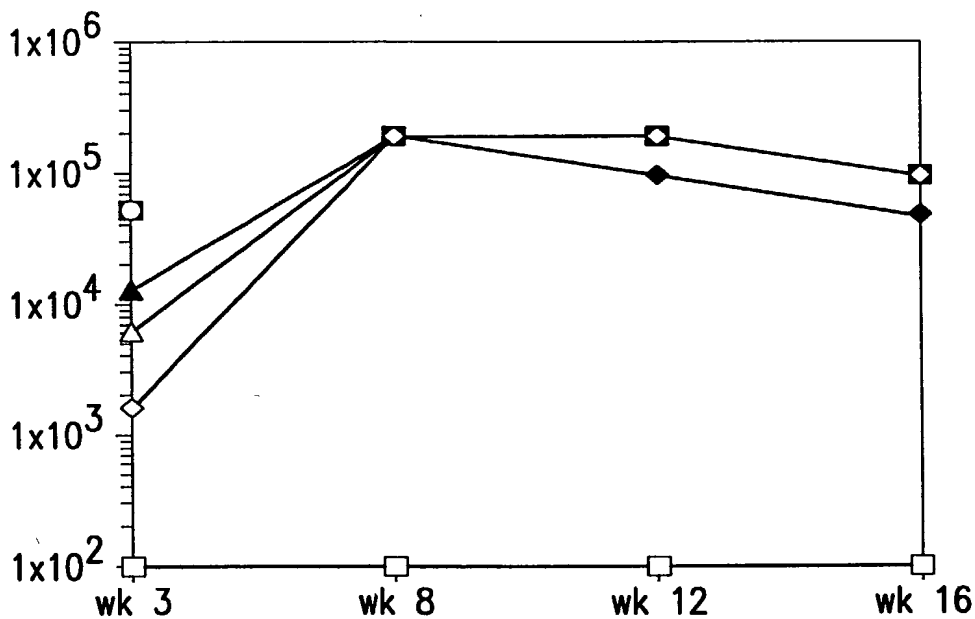


FIG. 10A

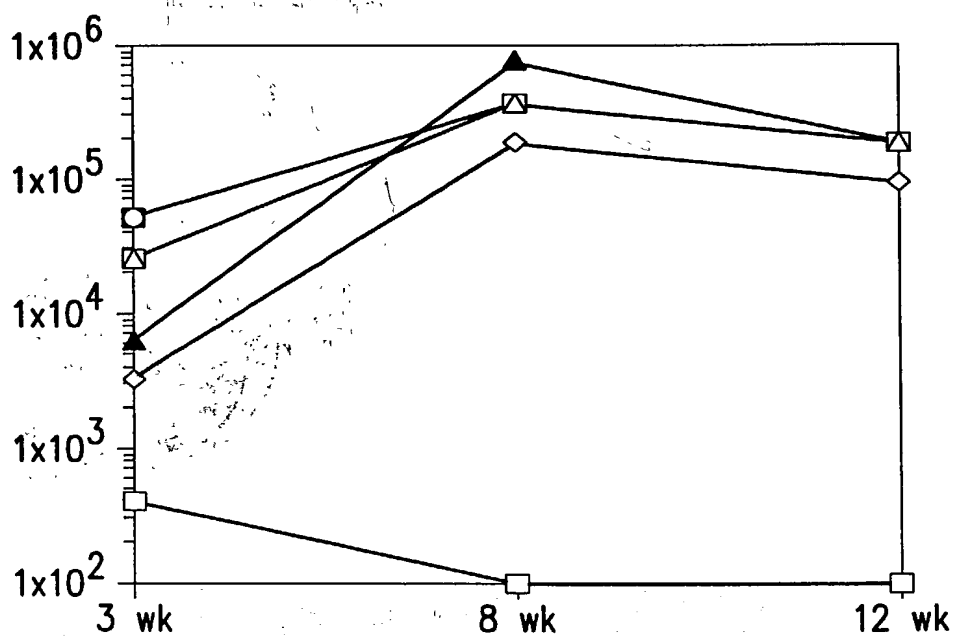


FIG. 10B

Docket No.: 10271-037-999
Serial No : 10/015,085
Inventor(s): LANGERMANN et al.
Title. "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

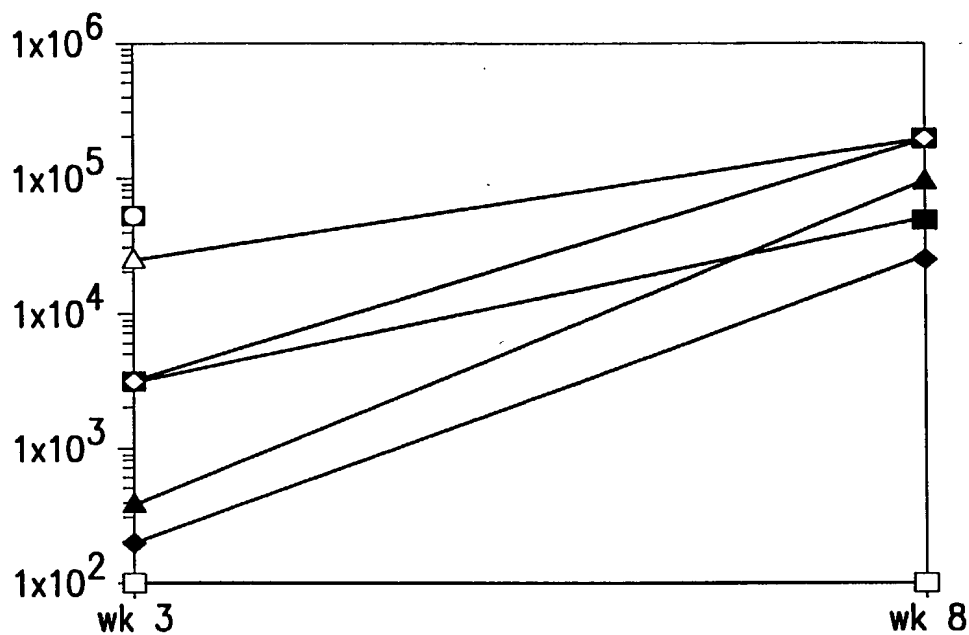


FIG.10C

Docket No : 10271-037-999

Serial No.: 10/015,085

Inventor(s): LANGERMANN et al.

Title "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

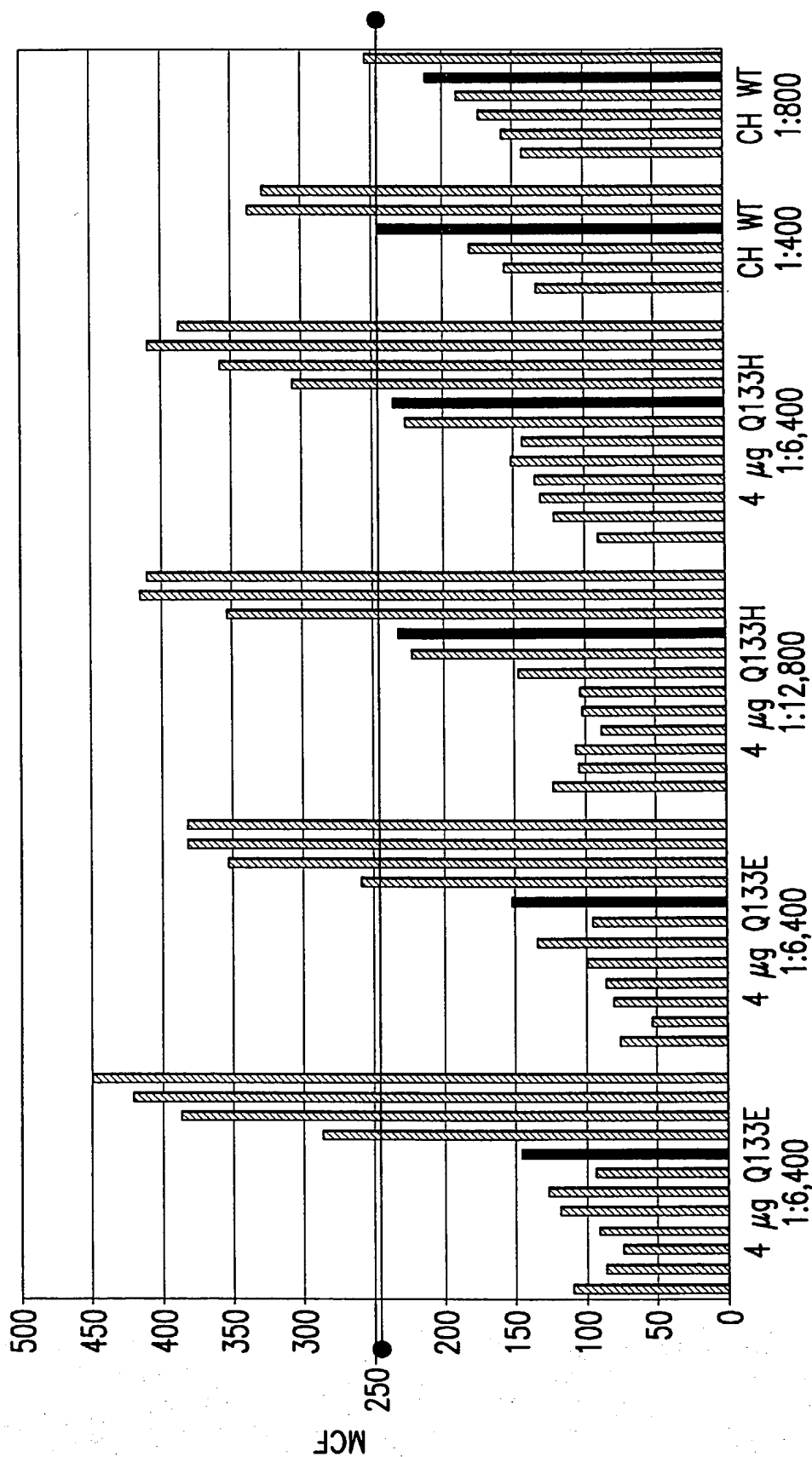


FIG.11A

Docket No.: 10271-037-999^{62 71}

Serial No.: 10/015,085

Inventor(s): LANGERMANN et al.

Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

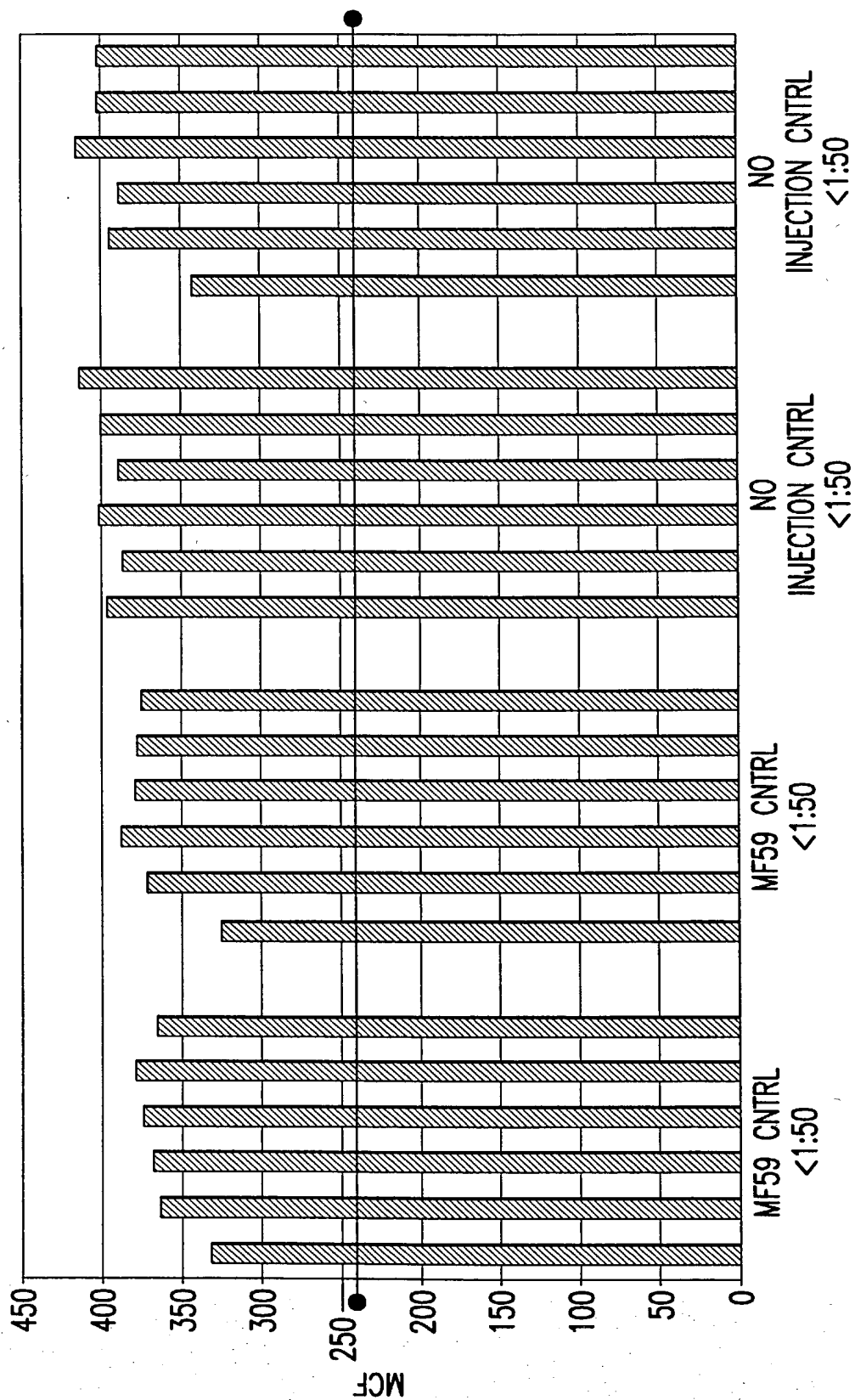


FIG. 11B

10015495, 051307

Docket No.: 10271-037-999

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Inventor(s): LANGERMANN et al.

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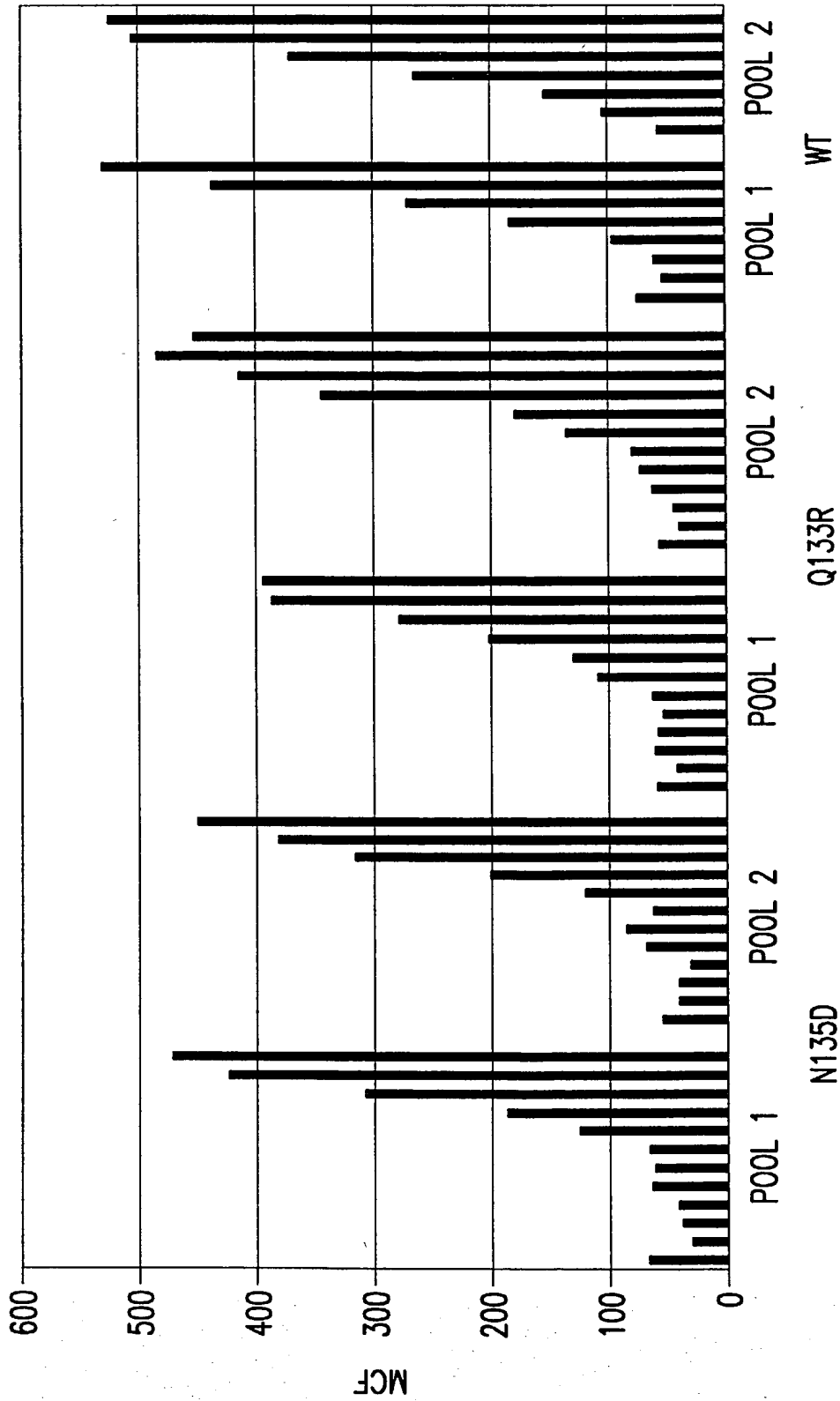


FIG.11C

Docket No : 10271-037-999
Serial No.: 10/015,085
Inventor(s): LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

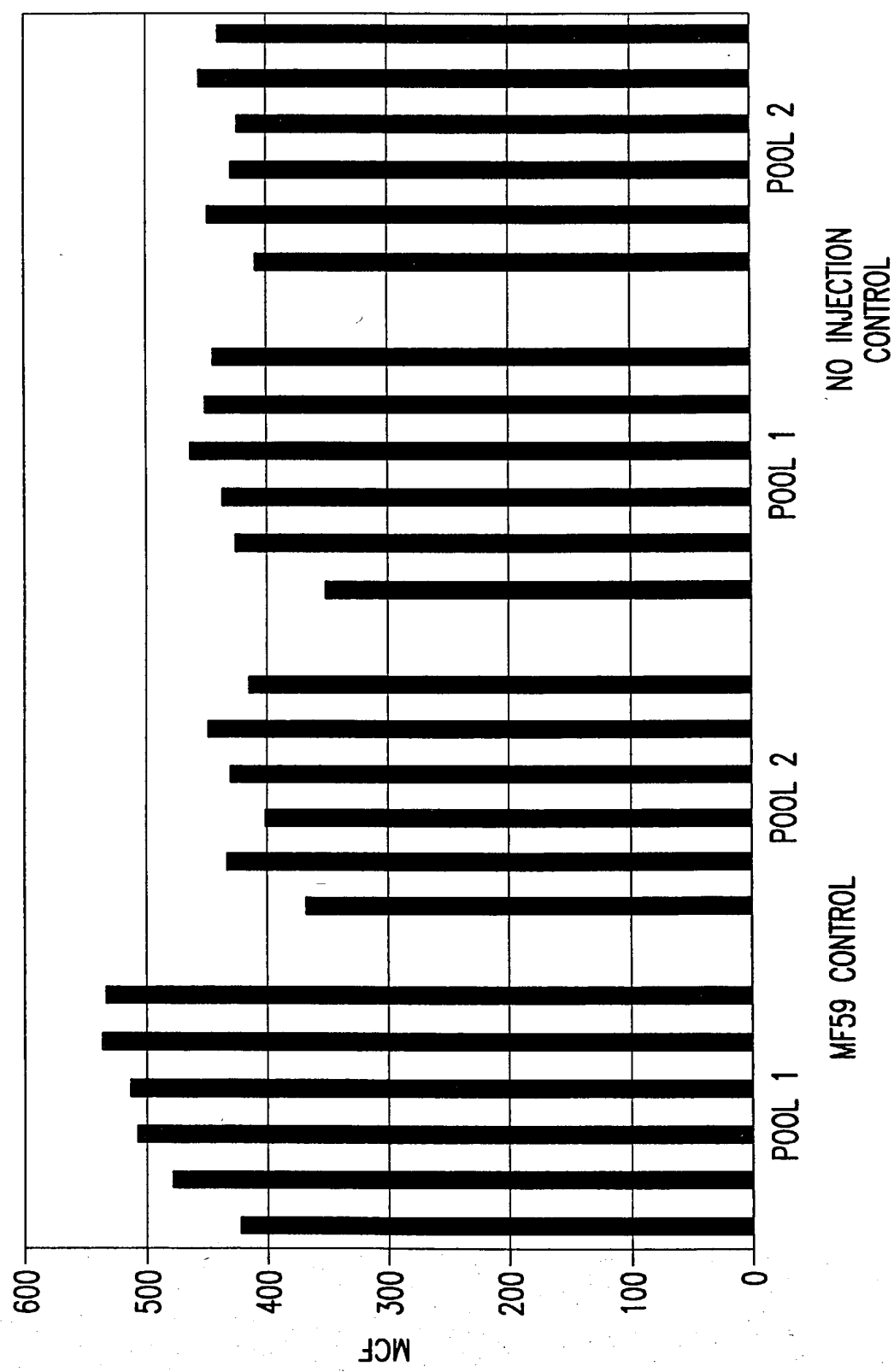


FIG.11D

Docket No.: 10271-037-999

Serial No.: 10/015,085

Inventor(s): LANGERMANN et al.

Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

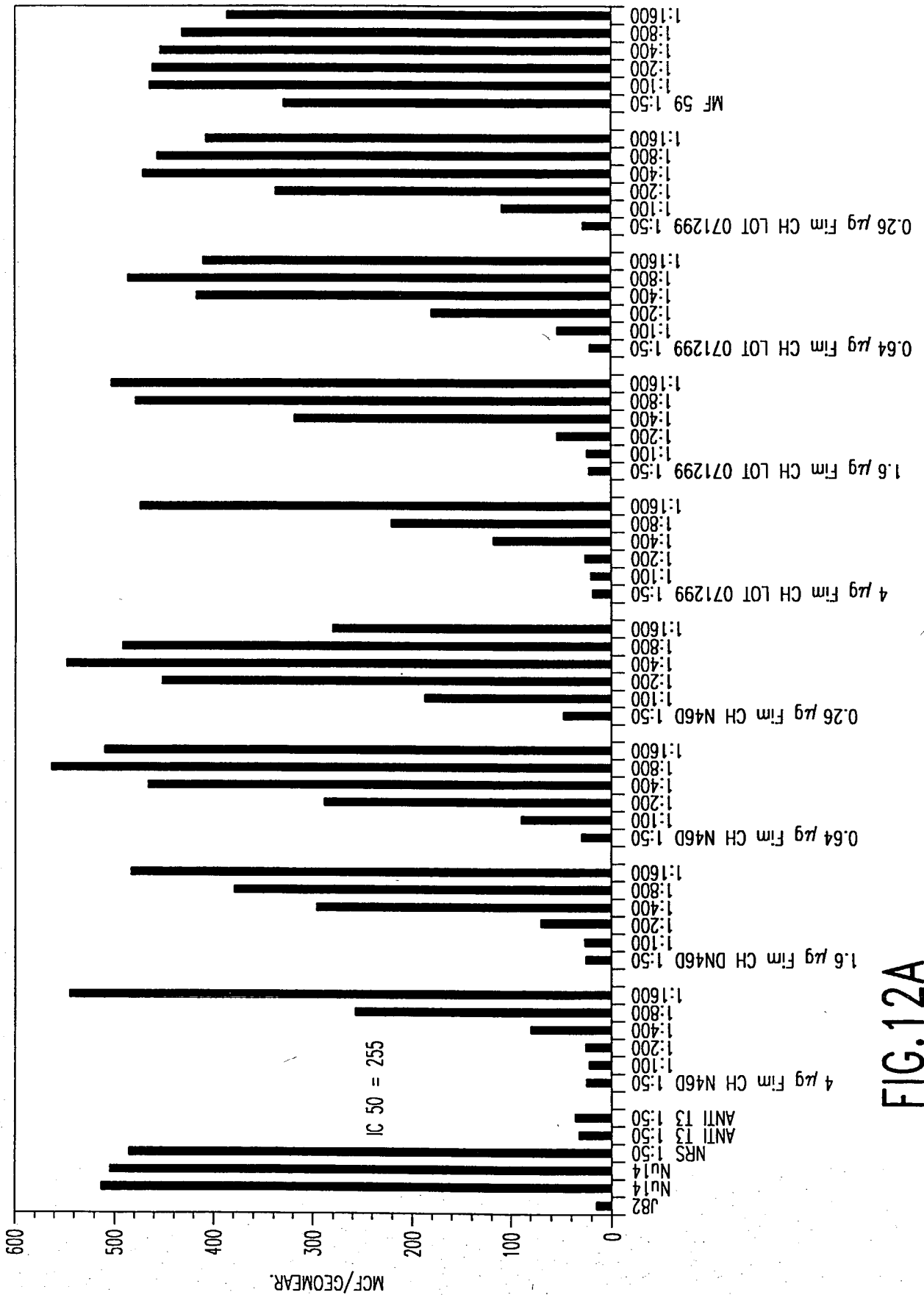


FIG.12A

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 Inventor(s): LANGERMANN et al.
 Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
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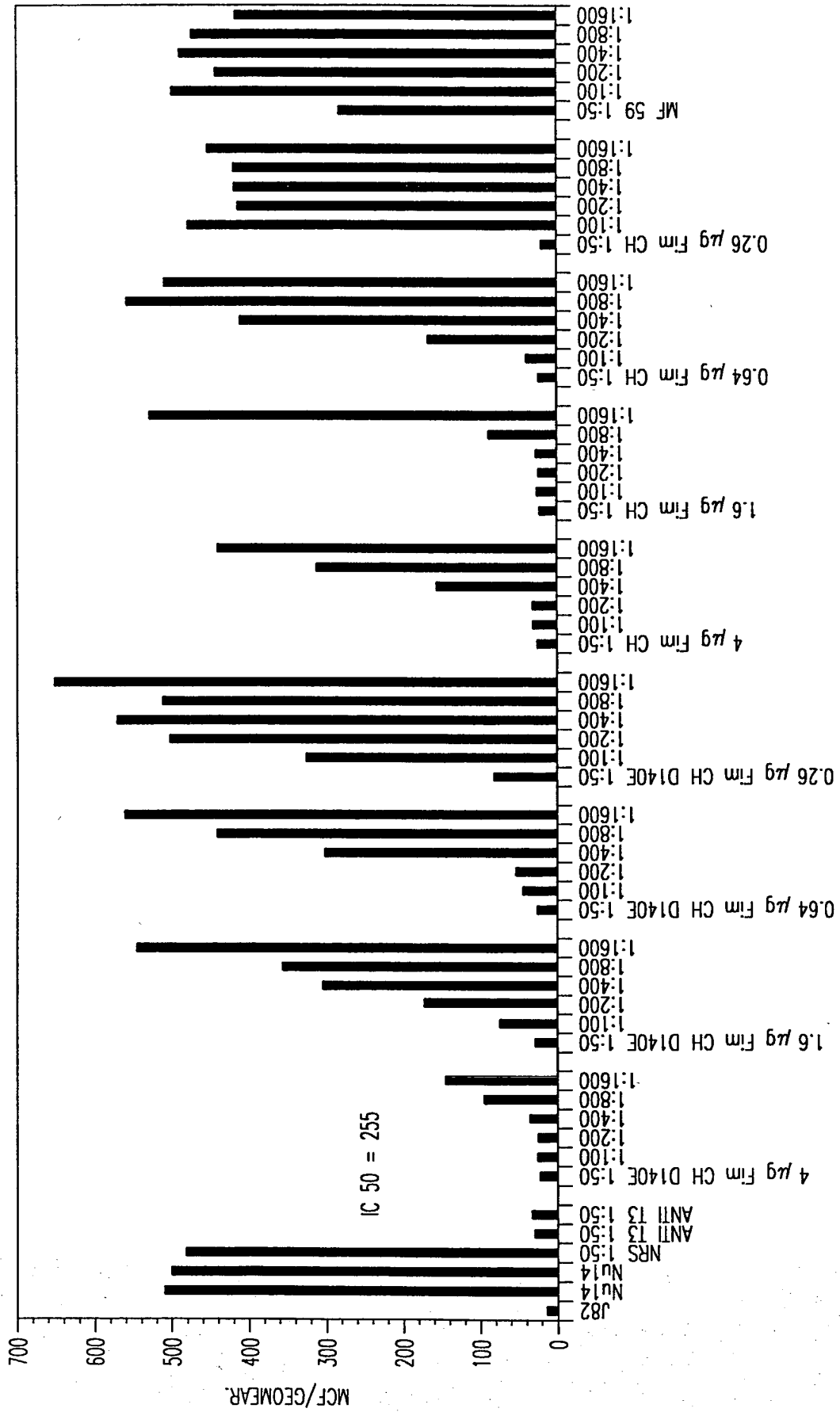


FIG.12B

Docket No : 10271-037-999
 Serial No 10/015,085
 Inventor(s). LANGERMANN et al.
 Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
 ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

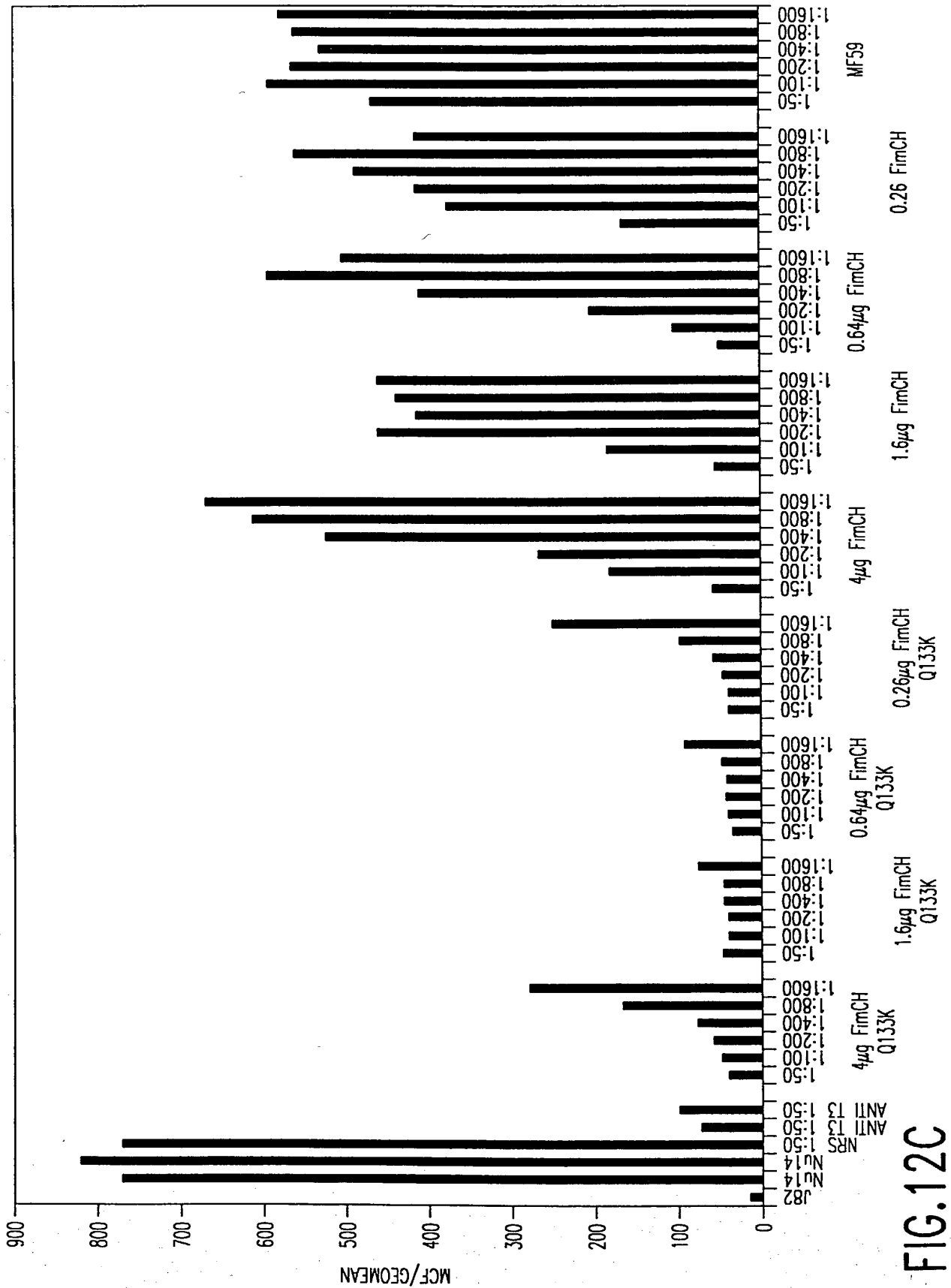


FIG.12C

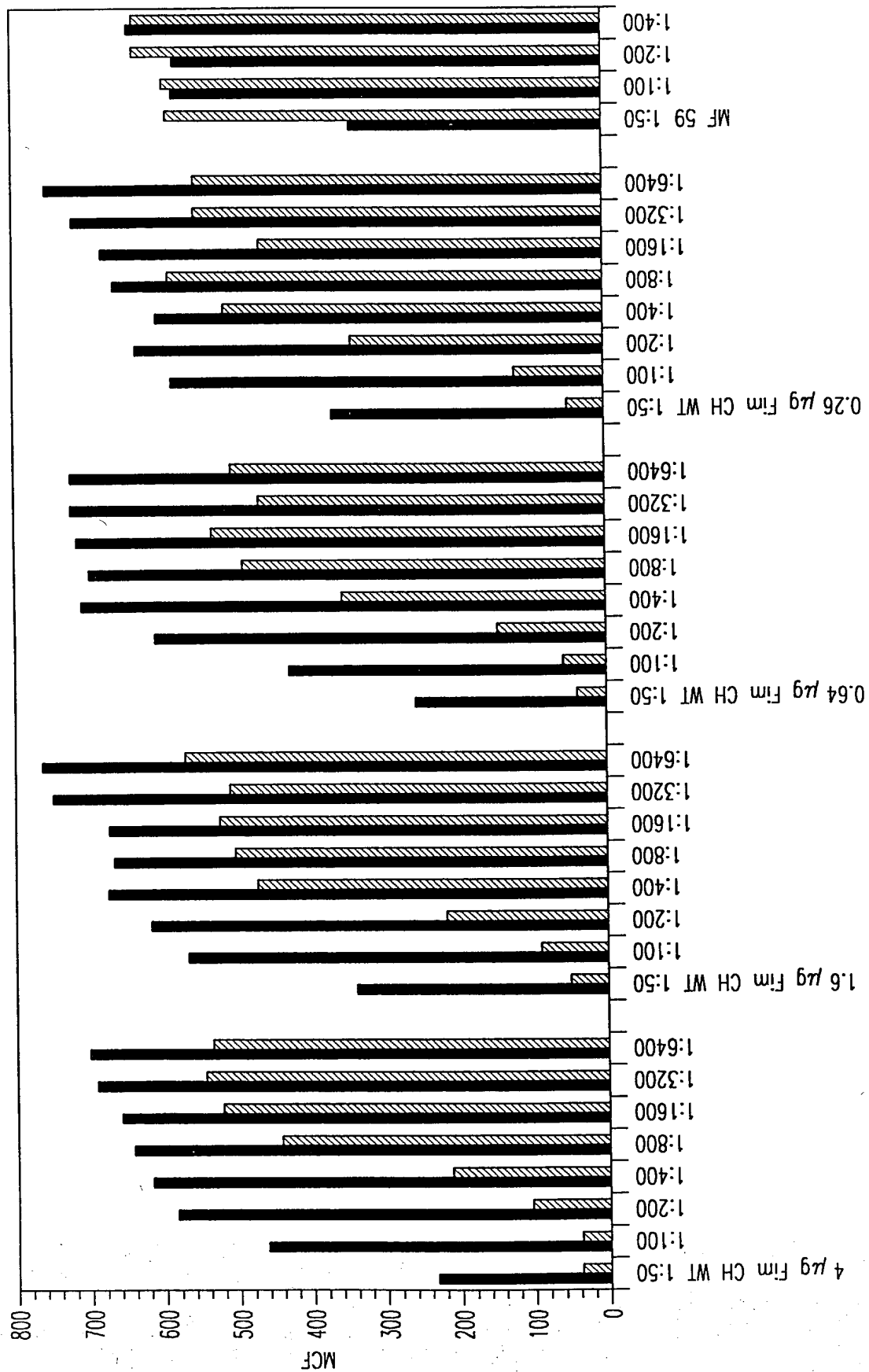


FIG.12D

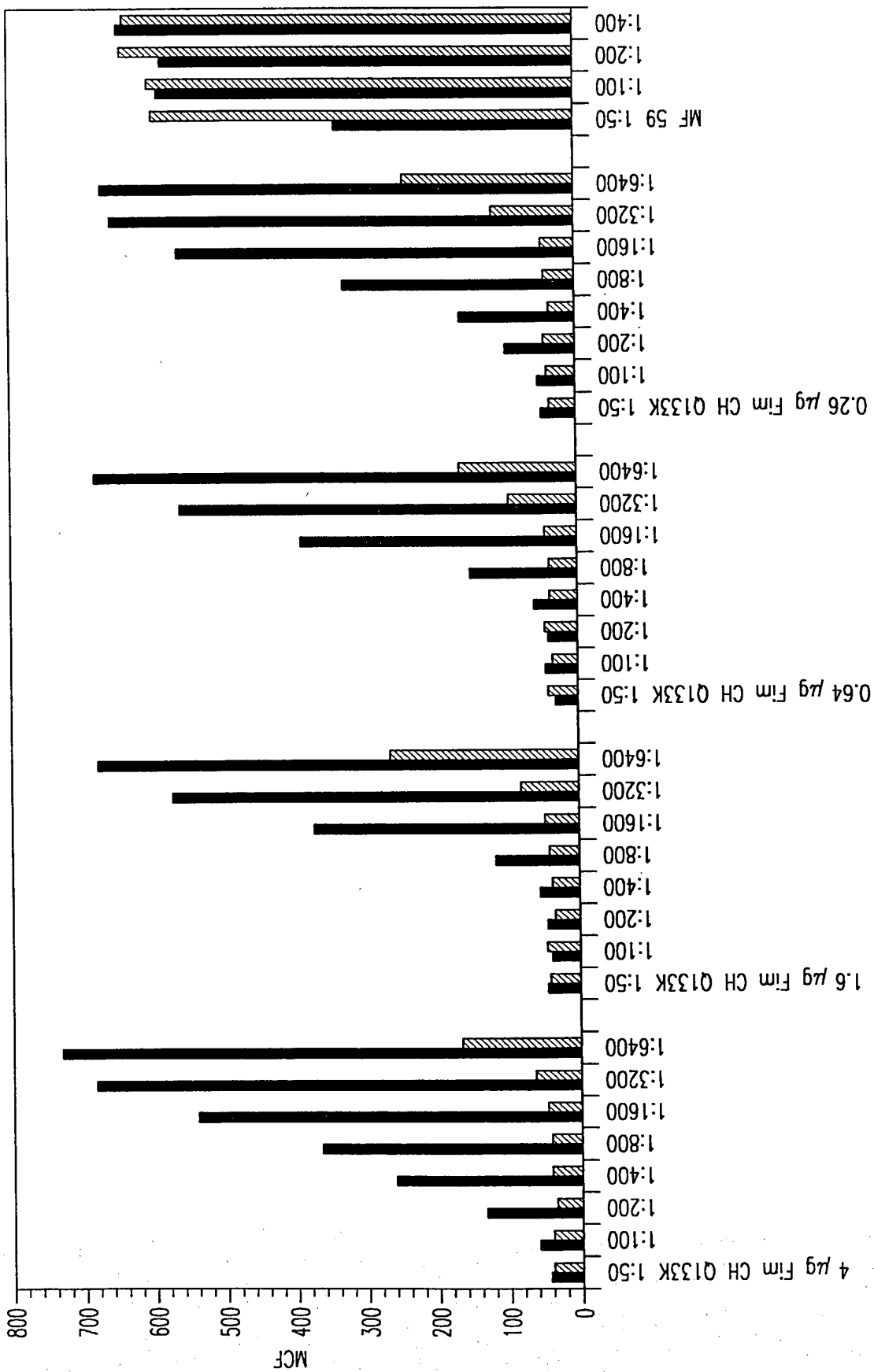


FIG.12E

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Inventor(s): LANGERMANN et al
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

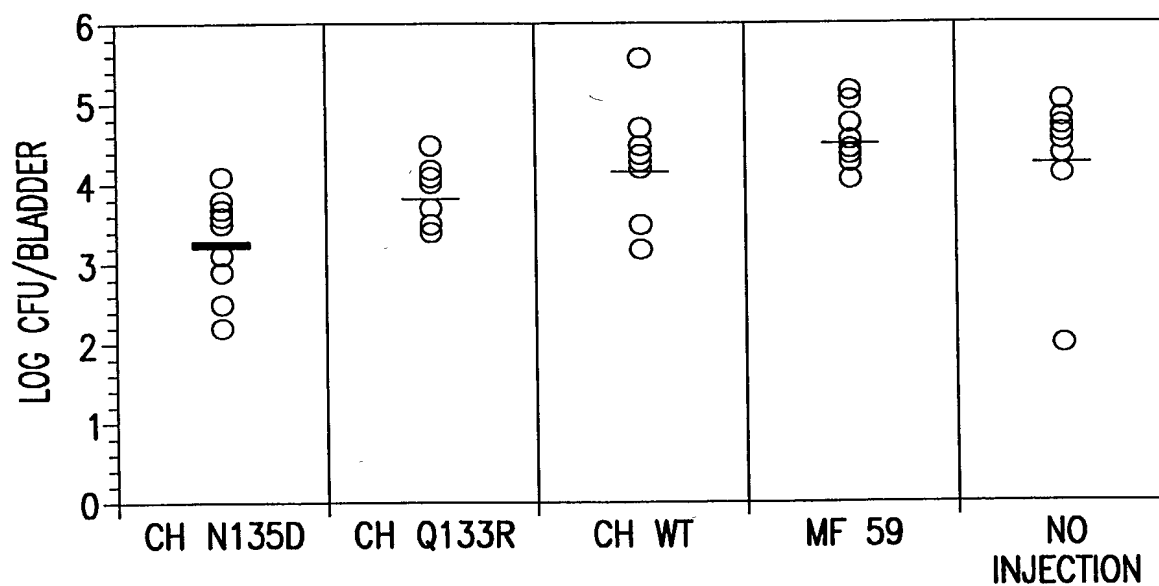


FIG.13

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Serial No.: 10/015,085
Inventor(s). LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

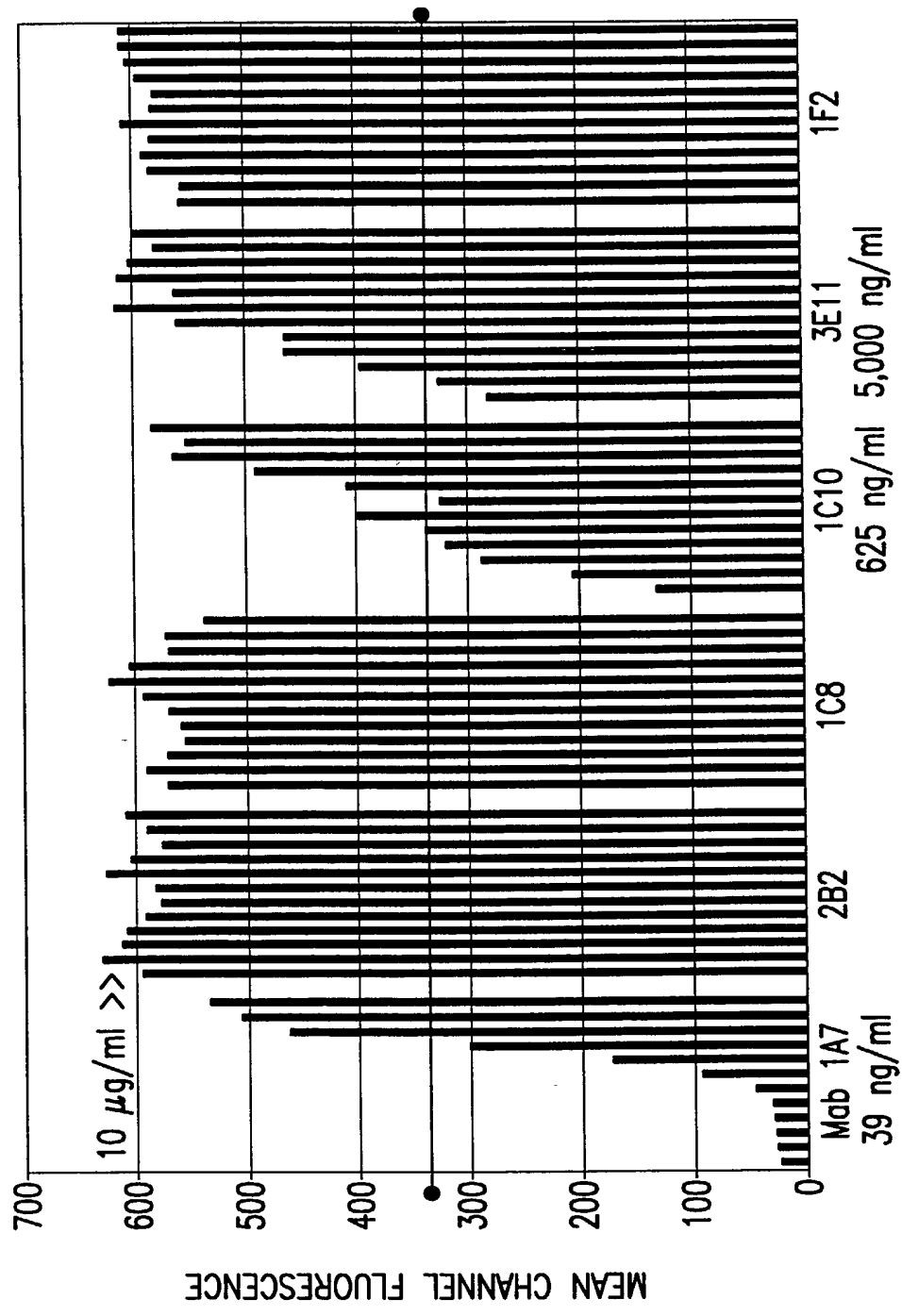


FIG.14

Docket No.: 10271-037-999
Serial No.: 10/015,085
Inventor(s): LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

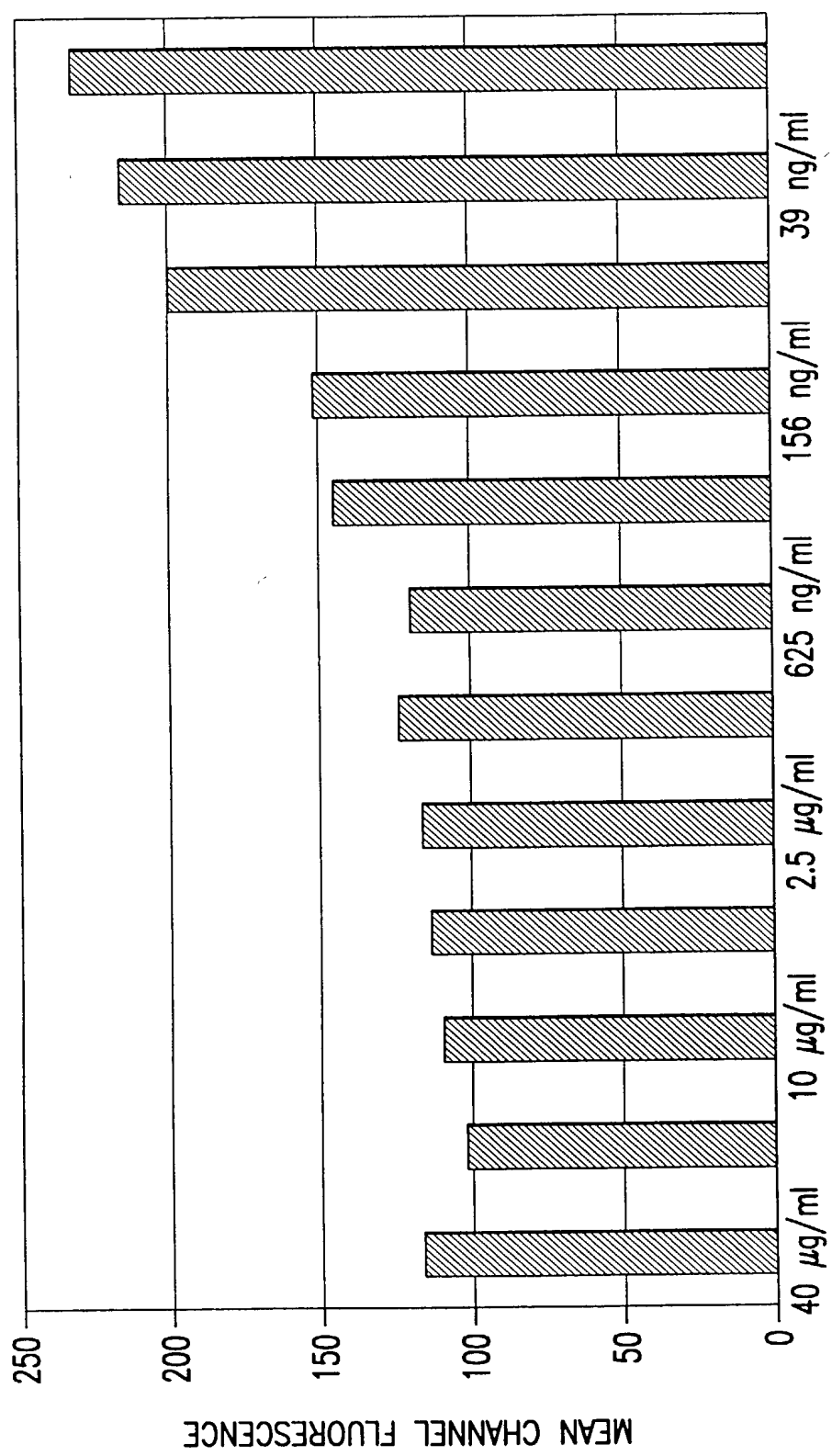


FIG.15A

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Inventor(s). LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

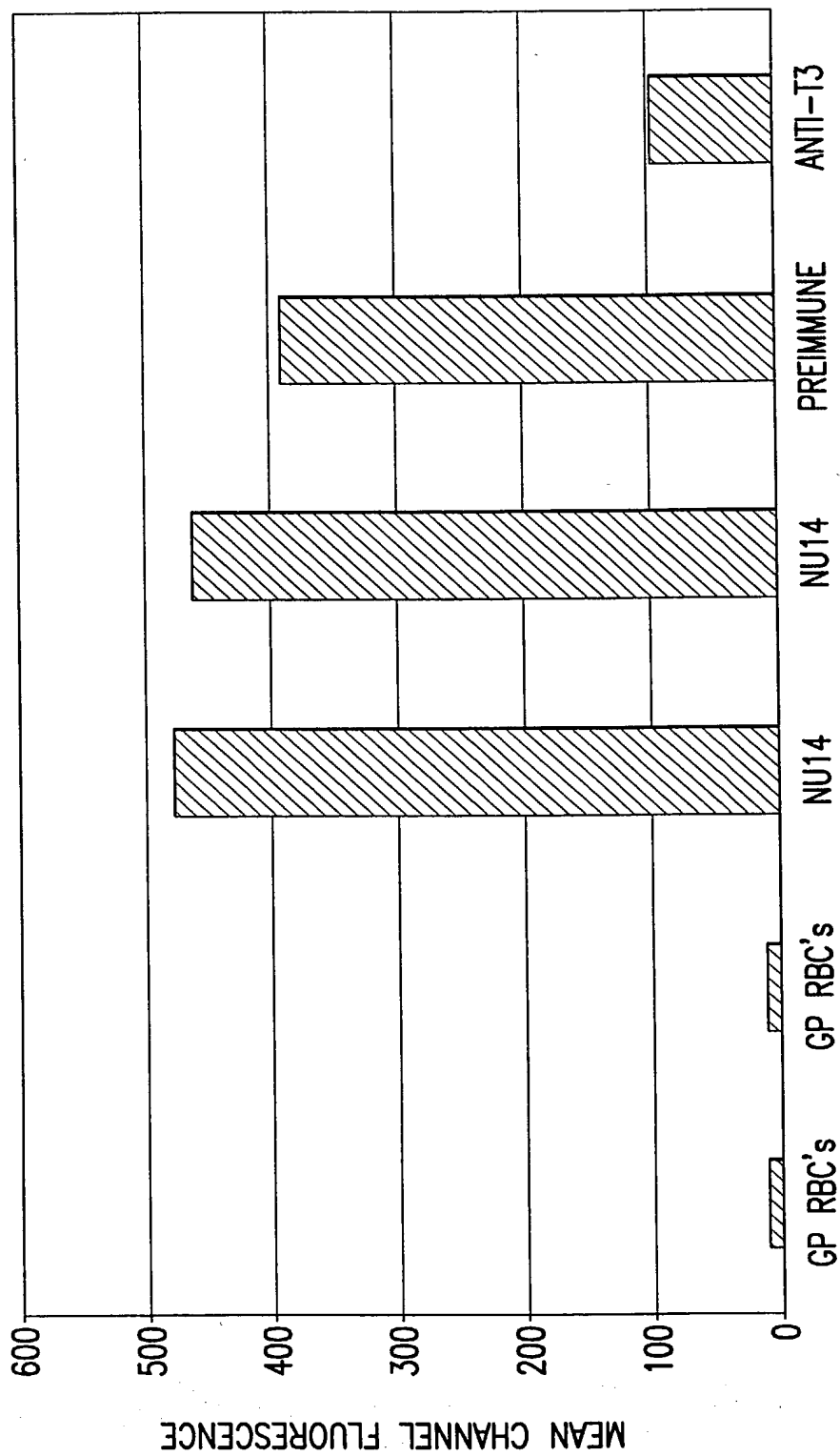


FIG.15B

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Serial No.: 10/015,085
Inventor(s): LANGERMANN et al.
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

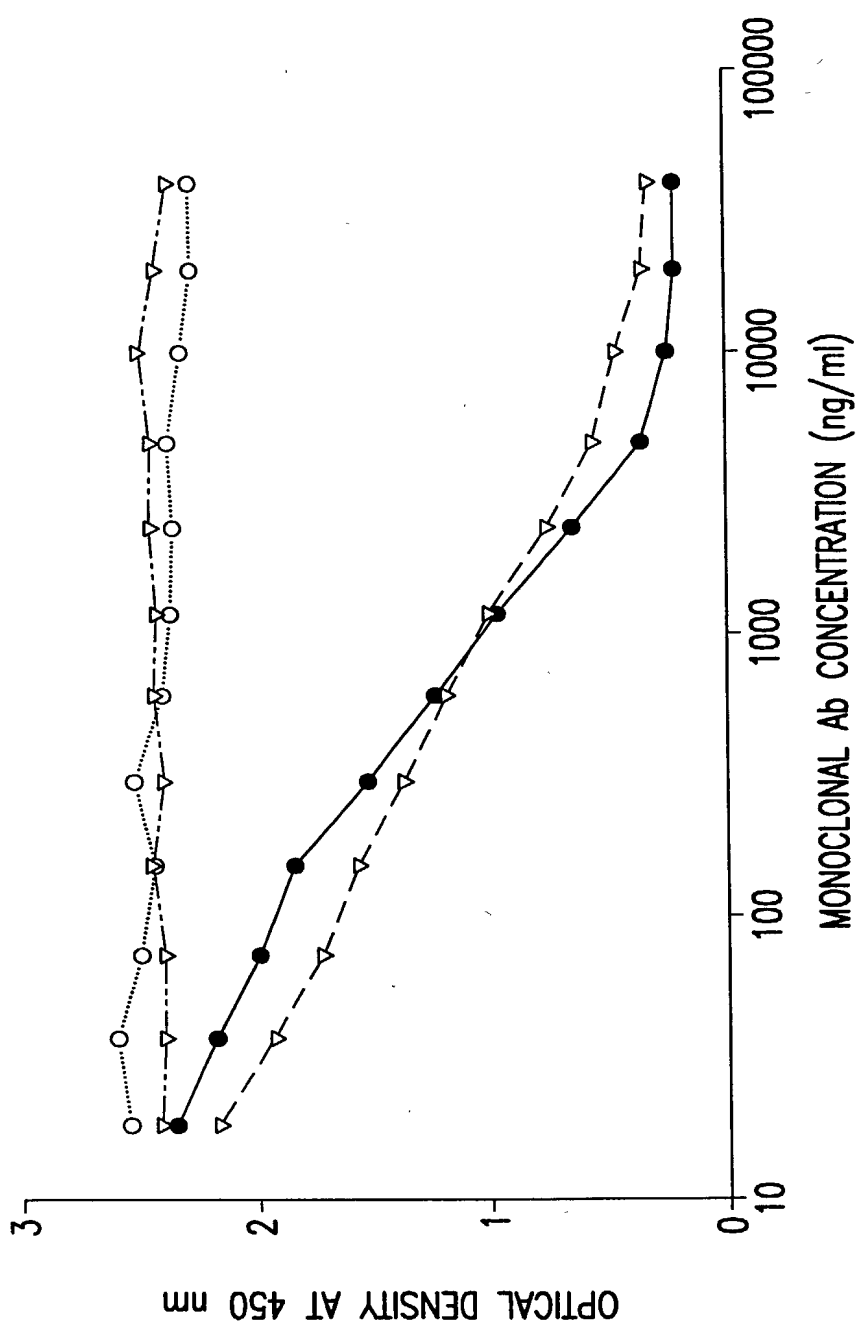


FIG.16

Docket No.: 10271-037-999
Serial No : 10/015,085
Inventor(s): LANGERMANN et al
Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

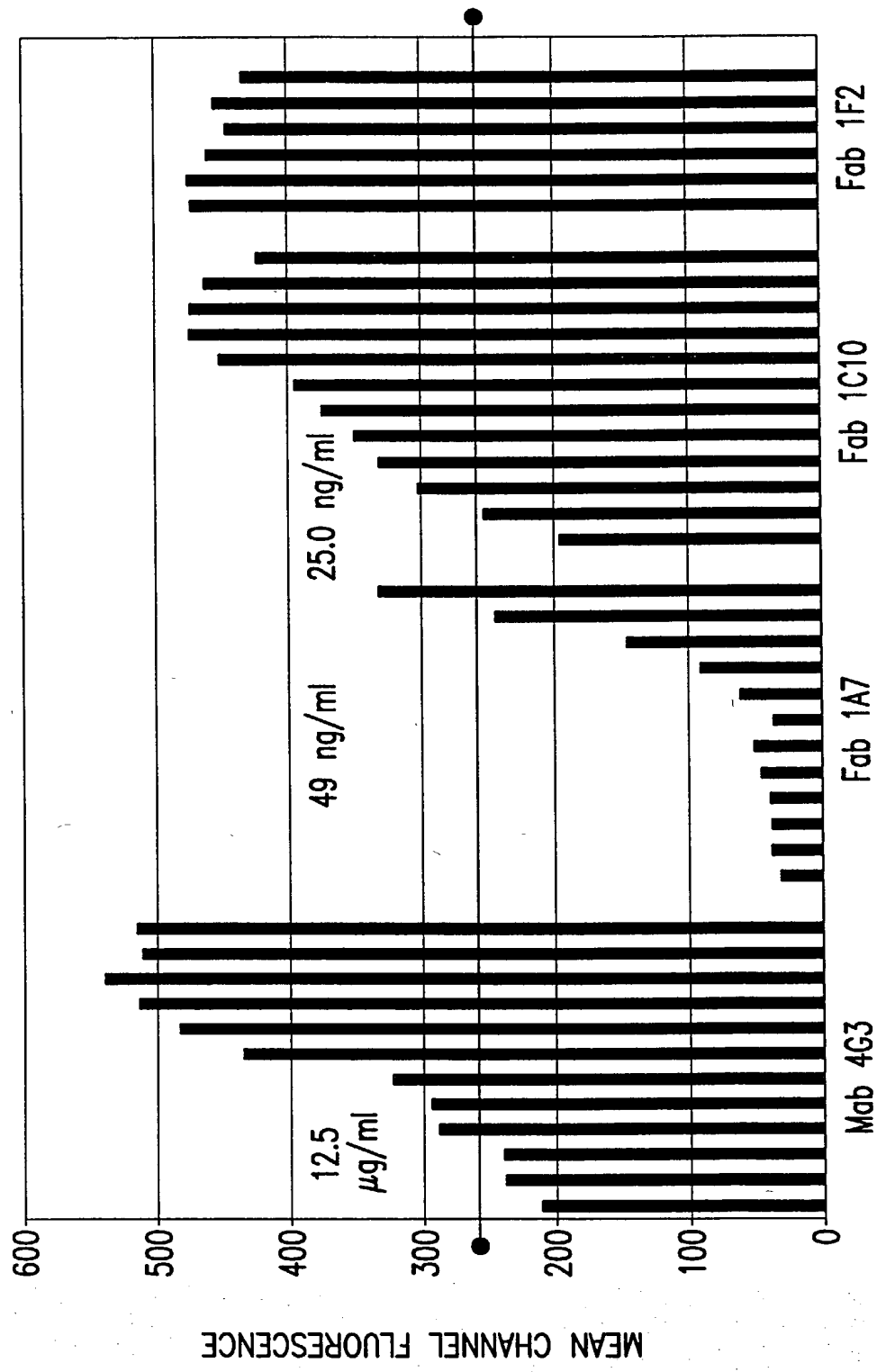


FIG.17

Docket No.: 10271-037-999
 Serial No.: 10/015,085
 Inventor(s): LANGERMANN et al.
 Title: "MUTANT PROTEINS, HIGH POTENCY INHIBITORY
 ANTIBODIES, AND FimCH CRYSTAL STRUCTURE"

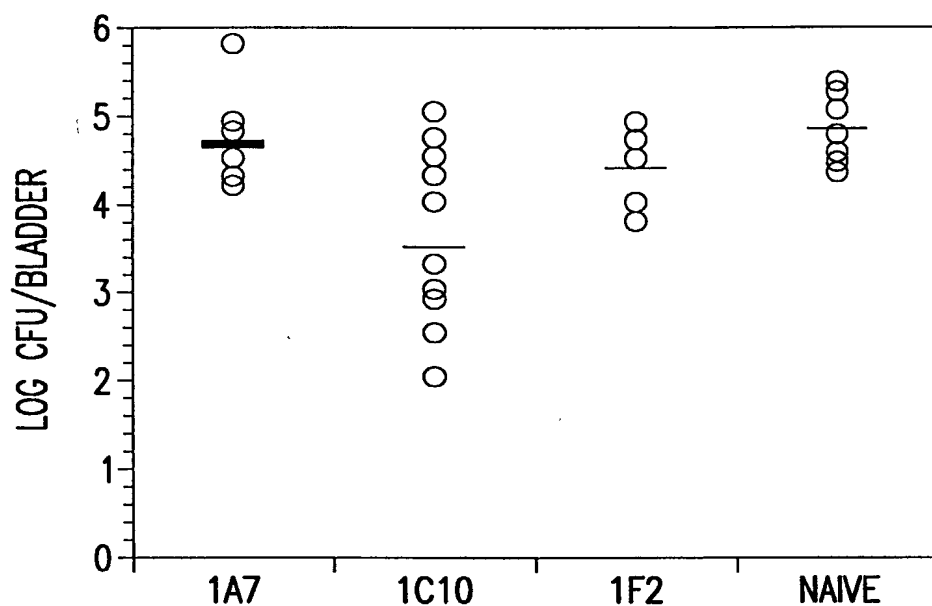


FIG.18

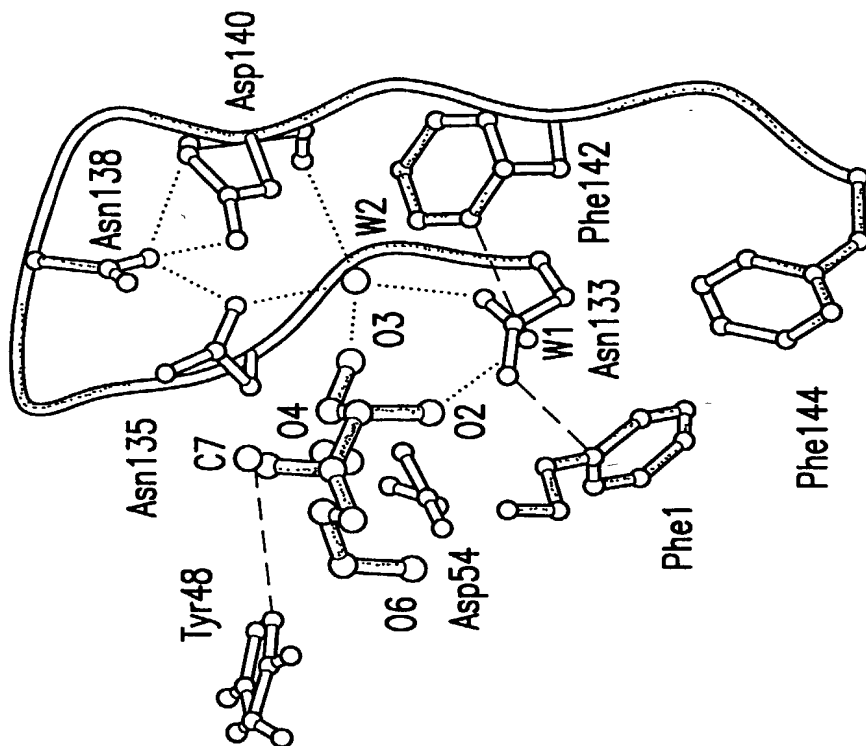


FIG.19B

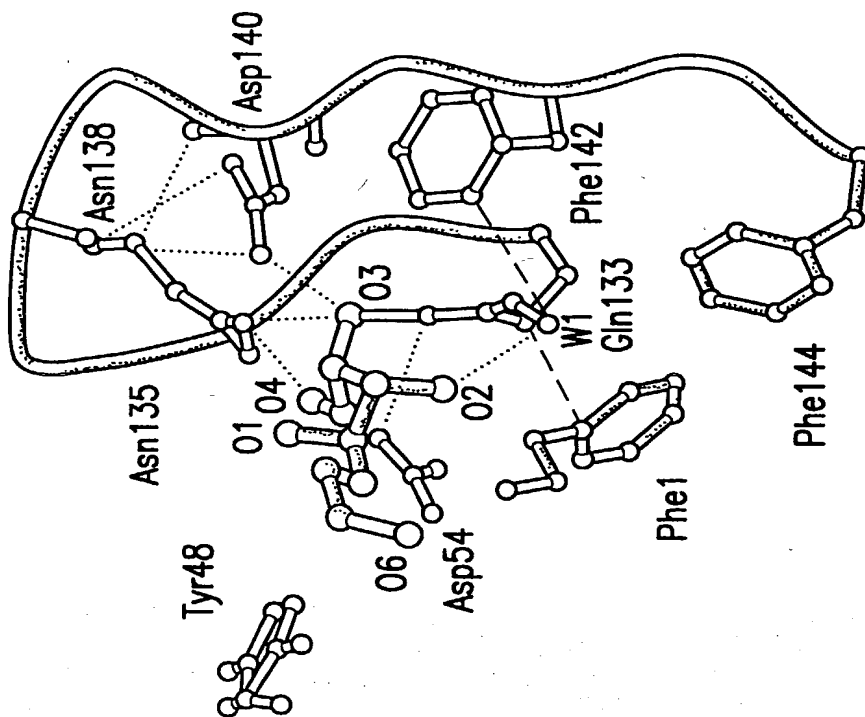


FIG.19A